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SELECTIONS FROM THE RECORDS OF THE FINANCIAL COMMISSIONER'S OFFICE, NO. 30.

No. LVIII.—PAPERS AS TO ALLUVIAL ASSESSMENTS IN THE JULLUNDUR DIVISION.

Summary of Correspondence as to Alluvial Assessments in Ludhiana, Hoshiarpur, Jullundur and Fazilka.

LUDHIANA.

In Ludhiána the cultivation not being, as on the lower part of the river, entirely dependent on the land being flooded, a fluctuating assessment for the alluvial lands was not proposed, nor has the annual assessment on lands affected by river action been made to vary according to the kind of crop grown. The system of alluvial *chaks* had been introduced in 1862, and this was retained in the settlement made in 1878-83. The limits of the alluvial tract may be extended, if necessary; while on the other hand a *chak* may be placed under a fixed assessment, if it remains for 5 years unaffected by the river. Within the *chaks* the rules of assessment are, that all culturable waste pays one anna per acre, and that new cultivation is assessed in the first year at one-fourth of the *ek-fasli* rate of the circle, one-half in the second year, three-fourths in the third year, and the full rate in the fourth year. This rule cannot be departed from in any case. The Settlement Officer proposed to give the district officer a general power of modifying the rates, but this provision was disallowed by higher authority. The Settlement Commissioner urged that, after the second year, reference should be made to the kind of crop actually grown, and that full rates should be charged as soon as a crop of superior kind was cultivated, but not sooner. The Financial Commissioner (Mr. Lyall), however, considered that, as regards the Ludhiána district, it was too late to alter the orders on this point previously passed by him on the assessment reports.*

* Financial Commissioner's No. 209 C. of 20th September 1882.

HOSHIARPUR AND JULLUNDUR.

In the Hoshiárpur district the rule of alluvial assessment in force before the late settlement was that of taking up every case in which increment or decrement has occurred, and assessing each field gained on its estimated value. On the matter coming under discussion in 1882, in connection with the revision of settlement, the Financial Commissioner (Colonel Davies) pointed out that this system had, in 1875, been approved by Government for general adoption, in preference to either the 10 per cent. rule or the *chak* system. There being no necessity in this district for a fluctuating assessment, the above system was therefore continued in Hoshiárpur. But for the guidance of the assessing officer, rules were laid down whereby the rates to be charged on alluvial lands were regulated according to the crop actually grown.

A set of rules and table of rates were prepared by the Settlement Officers of Hoshiárpur and Jullundur jointly, and made applicable to both districts with the sanction of Government.†

† Secretary to Government's No. 108 of 20th May 1885.

In Jullundur, as there are many villages, part of the area of which is situated on the high bank of the river quite out of the reach of floods, the rules were made to apply in such cases only to the alluvial *chak*.

The rates fixed are as follows :—

	Per Acre. Rs. A. P.
I. For uncultivated land fit for cattle grazing	0 1 0
II. For land sown with poor rice (kharsa) swánk, ruah, methí, ken, charál, matar, linseed, masar, barley, masar and barley mixed	0 12 0
III. For land sown with crops other than the above, not being sugarcane, if only one crop is grown in the year, or if two crops are sown when one or both of them belong to the class mentioned in clause II.	1 8 0
IV. For land sown with sugarcane, or with two crops in the year, except when one of the crops belong to the class mentioned in clause II	2 4 0

Any land uncultivated at settlement, and afterwards cultivated, is liable to the above crop rates. But the grazing rate is applied only to land which the action of the river has, since settlement, rendered fit for grazing. Reduction of the settlement rate on cultivated land is allowed only on proof that its deterioration is the effect of river action, and when once a reduction is allowed, the assessment is thenceforth regulated by the above table only.

Amended forms have been prepared for the use of the patwárís in recording and reporting alluvial changes.

The forms and rules have been extended to the Ferozepore district.

FAZILKA.

In the Fázilka Hitár tract an irregular system of fluctuating assessment had, before the revision of settlement, been in operation in 44 out of 62 villages which appeared unable to bear their fixed assessments. When the district came under settlement in 1879-83, it was decided that these villages should be placed under a fluctuating system, similar to that adopted for the Rávi villages in the Montgomery district.

The rules finally adopted* were that a low fixed rate, averaging $\frac{3}{4}$ anna per acre, payable with the kharíf revenue, was first imposed on the whole assessable area, whether cultivated or not, and the following rates were fixed for land actually producing a crop during the year :—

* Secretary to Government's No. 155 of 19th June 1882.

	Per Acre. Rs. A. P.
Unirrigated lands	0 8 0
Flooded lands—	
(1) Churál, masar, methra	0 12 0
(2) Other crops	1 4 0
Well and jhalár lands—	
(1) Single crops	1 8 0
(2) Double crops	2 4 0

Lands on which the crop has failed are exempt. A rate of Rs. 1-8-0 was at first proposed for the better crops on flooded lands, with a proviso that, where the produce was much below the average, only half rates should be charged; but the Financial Commissioner preferred to reduce the general rate to Rs. 1-4-0, and to abandon the proviso. The Settlement Officer had not desired to put any higher rate on lands irrigated by wells than on other flooded lands, but the Settlement Commissioner recommended an additional assessment of Rs. 6 per well, in place of which the Financial Commissioner preferred to adopt a slightly higher average rate for well and jhalár lands. Wells which have protective *pattas* are charged half rates. The above rates were calculated to bring in the same amount, on an average of years, as those which would have been adopted for a fixed assessment. They were considered to represent the value of one-eighth of the crop on well lands, one-sixth on flooded lands, and one-tenth on land without irrigation. The people at first considered the rates high, and were doubtful whether they would not prefer a fixed demand. But, on the other hand, 18 villages (pargana Bahák,) of which the former settlement was unexpired, with one exception, voluntarily chose to adopt the fluctuating system. The cultivated area of the whole Hitár chak is about 25,000 acres.

On the extension to this tract of the Ferozepore inundation canal system, the question arose, what Government revenue should be charged on lands irrigated by these canals. Colonel Grey's opinion was that the fluctuating system should be abolished in respect of lands receiving canal water, as this cultivation might be considered to be secure. The Financial Commissioner, however, considered that this course would be premature. It was recommended by the Financial Commissioner, and approved by Government,* that the same rates should be paid by canal irrigated land as by natural *sailaba*, but that where such land was recorded at settlement as *baráni* it should, for a term of ten years, be charged at half rates; the zamindárs, by whose labour the canals were made, thus obtaining a concession similar to that allowed to the constructor of a well.

* Secretary to Government's No. 24 of 7th July 1884.

Papers as to Alluvial Assessments in the Ludhiána District.

No. 248, dated Kasauli, 4th September 1882.

From Major E. G. Wace, Settlement Commissioner, Punjab, to F. C. Channing, Esq., Senior Secretary to the Financial Commissioner, Punjab.

Settlement Commissioner, to Settlement Officer, Ludhiána, No. 631, dated 22nd June 1882.

Settlement Officer's reply, No 166, dated 18th August 1882, and enclosures, English and Vernacular.

Settlement Officer's subsequent note, dated 29th August.

With reference to the instructions of Government contained in para. 2 of the Secretary's letter No. 1078, dated 5th November 1880, I have the honour to submit, for the Financial Commissioner's orders, copy of a correspondence as per margin, on the subject of the entries relating to the fluctuating assessment of the Sutlej Bet lands in the Ludhiána district, which it is proposed to insert in the new tenders of engagement.

2. The Settlement Officer wishes to make these entries in para. 14 of the wajib-ul-arz. But I think it is preferable to continue the practice that has arisen since the enactment of the Land Revenue Act in 1871, and which is based on Section 32 of that Act, *viz.*, to incorporate in the tender of engagement any special conditions attached to the assessment.

3. I also propose to instruct the Settlement Officer that, when only a part of a village is under fluctuating assessment, there must be prepared for such part an excerpt of the settlement record, of the nature directed in Land Revenue Act, Rule C. III., 10. The exact meaning of this rule, read with D II., 14, is not very clear, and consequently some definite instructions are required. Either columns should be added to the khewat, showing separately the land under fixed and fluctuating assessment, and the assessment of each; or the alluvial chak land should be entered in the khewat as a separate táraf. The former expedient is not a convenient one; and I recommend that the alluvial chak, under fluctuating assessment, be shown at the end of the khewat after, and separate from, the land under fixed assessment.

See also para. 1 of Appendix C. Circular XLII., dated 7th Sept. 1860.

4. The draft of conditions framed by the Settlement Officer does not seem to me to express conveniently the system of assessment sanctioned in the Financial Commissioner's orders. But in the first place, I should be glad to know whether I am right in thinking that all the alluvial chaks should be treated as off the fixed rent roll and under fluctuating assessment. With reference to the orders of Government, noted in the margin, which have since been uniformly applied, it seems to me clear that the assessments of these alluvial chaks must be credited to fluctuating land revenue, and cannot be kept any longer on the fixed rent roll; being sanctioned from year to year, not by the Financial Commissioner, but by the Deputy Commissioner. It was apparently the express intention of Government, in issuing the orders under reference, to gradually take all such assessments off the fixed rent roll. The Settlement Officer's draft entries appear to be framed under the assumption, that the assessment of the alluvial chaks should still, as far as possible, be treated as fixed revenue. And in the entries which I propose to substitute for them, I am influenced by a desire to follow the Government's instructions above quoted, and to put the system very clearly before both the land-owners and the district authorities.

Proceedings, Punjab Government, No. 4 of February 1879 and 5 of May 1879 (R. A. C. Department). See especially in the latter part of para. 2 of Secretary to Government's letter 613, dated 7th May 1879.

5. I accordingly enclose two drafts, A. and B., which I would substitute for the draft conditions recommended by the Settlement Officer. The rates stated in para. 2 of draft A. differ by decimal fractions of an anna from those sanctioned in para. 24 of your No. 50 C. S., dated 1st June 1882. The reason of this is that, in future, all the annual papers will be kept in the kacha bigah, which is $\frac{5}{24}$ths of an acre. I have therefore stated a convenient rate per kacha bigah, which agrees very closely with the rate per acre sanctioned by the Financial Commissioner, and I hope that the slight resulting variation from the Financial Commissioner's acre rate will be passed.

Para. 13 of this office No. 149 C., dated 25th April 1882, and Settlement Secretary to the Financial Commissioner's No. 2331, dated 3rd April 1882.

6. I have also proposed in my draft conditions another alteration of a more important character, which I desire to recommend earnestly to the consideration of the Financial Commissioner. His orders approved of the Settlement Officer's proposal, that newly cultivated land should be assessed progressively, thus:—

1st year	quarter rate.
2nd year	half rate.
3rd year	three-fourth rate.
4th year	full rate.

In para. 18 of my letter forwarding the Ludhiána and Jagráon assessments, I remarked that it would not be safe to assess new cultivation by progressive rates of this nature; that such a rule would sometimes be unfair to the owners and sometimes to the State; and that the action of the river on these lands is not uniform, but fickle. I now find that the Assistant Settlement Officer of Hoshiárpur writes in his Garhshankar assessment report, concerning the Sutlej Bet of the Garhshankar tahsíl which is nearly opposite to that of the Ludhiána district:—

"The circumstances of newly cultivated alluvial lands vary indefinitely from year to year, so long as they are liable to river action. They may become capable of bearing the best crops in one or two years. They may remain almost valueless for many years. They do most generally gradually improve in quality year by year from the time that they are first thrown up, but very often deterioration sets in just as they are beginning to be valuable. It is impossible to say definitely that the land can bear a previously determined rate of assessment after a fixed number of years. We must, in my opinion, be guided by the circumstances of the case each year."

The only provision in the Settlement Officer of Ludhiána's draft intended to meet these circumstances is as follows:—

"The assessment of the village or chak, calculated in the above manner, shall be deemed the revenue rate assessment * * *; but the assessing officer has the power to modify this assessment as he sees fit."

It appears to me that the conditions thus drafted, involve two principles of questionable character. In the first place, they assume 4 years in advance a progressive improvement of the land, which cannot be safely predicated; and in the next place, in order to correct this element of danger, they allow a discretionary correction of the fixed rates of a very wide character. The proposals also have a third shortcoming, to which I attach much importance. The agriculture of these lands, as pointed out in paras. 17 to 19 of my Ludhiána Review, affords a certain indication of the rates which can properly be assessed from year to year; and yet our rules for their assessment, as now drafted, will contain no provisions intended to direct the attention of assessing officers to this safe source of assistance in their work. Where the system of agriculture is such as to furnish safe guides to assessment, it seems to me to be our duty, as it is certainly our best policy, to endeavour to frame our assessment rules in such a way as to direct attention to those guides. I also demur to our binding Government to put off the assessment of the full rate until the 4th year after the land is first cultivated. This is a greater delay of the full assessment of such lands, than has as yet been contemplated in any other district; and in the Mooltan division two years, and sometimes only one, was considered an ample allowance for short assessment.

6. Without repeating what I have already urged at sufficient length in paras. 17 to 19 of my Ludhiána Review, I hope that the Financial Commissioner will be willing to approve of the following rule of assessment for the Sutlej Bet; which is neither quite the same as what I previously proposed, nor what was approved in para. 10 of the Financial Commissioner's orders on the

Ludhiáná assessments; but which will, I trust, be found to meet sufficiently the merits of the case, as they are to be gathered both from the Settlement Officer's reports and my own remarks.

"For the first year, one quarter rates shall be charged; from the second year half rates; and full rates shall be charged, as soon as wheat, barley, maize, or some other good crop is cultivated, but not sooner."

If the Financial Commissioner will accept this modification of the proposals previously approved by him, I shall feel that the objections urged in my previous paragraph are sufficiently met; and I shall also be able to ask that the same rule be applied to the Sutlej Bet of the Garhshankar tahsíl, and possibly to that of the Jullundur district also. I am convinced that, in these Bet lands, there is no reliable evidence of the fitness of land for assessment at full rates, other than the fact that wheat or some other equally good crop can be successfully cultivated on it. And we shall incur a serious responsibility if we fail to emphasize this in our assessment rules; or if we frame our rules in such general terms as will allow inexperienced assessing officers in the future, as in the past, to suppose that there is any other tangible test of good Bet land.

7. Before forwarding this letter to you, I sent it to the Settlement Officer for perusal; and enclose a note, dated 29th August, written by him in reply. The 1st paragraph of this note is written under a misapprehension. There will be no need to repeat in each year's engagement the conditions of the assessment. They will be stated once for all in the settlement engagement, of which the patwárís' record will include a copy. I think it important that the practice usually followed, since 1871, of entering the conditions of assessment in the tender of engagement is a convenient one, and that it should be adhered to.

Paragraph 2 of the note shows that the Settlement Officer has arranged the record of the alluvial chaks in the manner suggested in paragraph 3 of this letter.

As regards paragraphs 3 and 4 of the Settlement Officer's note, I should explain that the Settlement Officer has not seen the correspondence of 1879 quoted in paragraph 4 of this letter. It may be that I have misunderstood the intention of Government's letter No. 613, dated 7th May 1879, to your address; but I certainly think that the assessment of these alluvial chaks would be more correctly classed as fluctuating than as fixed. There remain the Settlement Officer's paragraphs 5 and 6. After considering these, I have altered the first year's rate from a third, at which I first proposed it, to a quarter. But I do not see my way to altering the rest of my proposals. The matter is for the Financial Commissioner's decision; but neither on my own experience, nor with reference to the care that Government requires of us in assessing lands of uncertain quality, can I recommend that the full rate of assessment be charged on new land, unless and until the crops grown evidence its fitness for such a charge. The district revenue establishment is certainly capable of applying correctly and fairly a check of this simple character. The confidence which Mr. Walker expresses in the gradual improvement of new sailab land on the Sutlej does not seem to me to be sound. It is certainly opposed to my own experience, and apparently to Mr. Kensington's, whose remarks I have quoted in paragraph 6 above.

Compare the original description of the system in Appendix C. of Book Circular No. XIII, dated 7th April 1860.

A.—Draft of conditions to be incorporated in the tender of engagements of Bet alluvial chaks of the Ludhiana district under fluctuating assessment.

The assessment of this mahal is fluctuating, that is to say, it will be made anew every year, according to the area cultivated and the area of grazing waste.

2. The yearly assessment will be by the agricultural year, commencing with the kharíf and ending with the rabi.

3. The assessment rates will be as follows:—

(1) Land now cultivated, and so assessed at settlement, will continue to pay the khewat rate until rendered unculturable by the action of the river. But if any land charged as do-fasli is so injured by the river, that it cannot any longer be cultivated as do-fasli, it may be reduced to the ek-fasli rate.

(2) Land cultivated subsequent to settlement will be charged the ek-fasli rate of the circle as below, provided that, for the first year only one-quarter rates shall be charged, for the second year half rates, and full rates shall be charged as soon as wheat, barley, maize or other good crop is cultivated ; but not sooner.

Tahsíl.	Circle.	Per acre.	Per kacha bigha.
		RS. A. P.	ANNAS.
Samrála	Bet	1 8 0	5
Ludhiána	Bet kacha	1 12 8	6
	Bet pakka I.	1 8 0	5
	" " II.	1 4 4	4¼
Jagráon	Bet	1 4 4	4¼

(3) When the full rate has once been charged on new land it will be continued every year, unless the land is injured by river action. If the injury is such as to prevent the cultivation of wheat or other good crop, half the rate shall be remitted. If the injury is such as entirely to prevent cultivation, the whole rate shall be remitted; and when cultivation is resumed, it will be assessed as above provided for new cultivation.

(4) Every year a rate of one anna per acre will be charged on all land not cultivated, which is suitable for grazing cattle.

(5) In the yearly assessments no rates shall be charged except those above described.

When the whole or part of the land thus assessed at fluctuating rates is no longer affected by the action of the river, and has so remained for 5 years, the Deputy Commissioner may, on the application of the owners, give to them a fixed jama at the above rates. But if subsequently such land again becomes subject to the action of the river, and remissions are consequently required, the jama shall again become fluctuating on the same terms as before.

B.—Draft of condition to be incorporated in the tender of engagement of Bet mahals of the Ludhiana district, not at present subject to river action.

If at any time we apply for a reduction of this assessment on account of river action, and it is necessary to give such a reduction, the Deputy Commissioner can make the jama of the whole village, or of such part as he considers right, fluctuating; and the land so treated will be assessed every year on the terms now sanctioned for fluctuating mahals of this Bet circle.

Copy of a letter No. 631, dated 22nd June 1882, from Major E. G. Wace, Settlement Commissioner, Punjab, to the Settlement Officer, Ludhiána.

With reference to the orders of Government contained in my Circular No. 3, dated 24th January 1881, I have the honour to request that you will submit at a very early date, for the Financial Commissioner's approval, a draft of the conditions of assessment which you propose to endorse on the tenders of engagement of the alluvial chaks of the Bet circles of the Ludhiána district.

2. This draft should express the orders of the Financial Commissioner contained in para. 10 of the Settlement Secretary's No. 50 C.S., dated 1st June 1882, and will apply (except so far as the sanctioned rates of each circle may vary) both to the Samrála and other tahsíls of the district. It should contain a brief statement of the system on which each year's di-alluvion assessments will be made, sufficient both for the information of the owners and for the guidance of the revenue officials.

3. I also solicit your attention to the 4th instruction at the end of para. 10 of the Settlement Secretary's letter above quoted. A draft of the entry which you propose to make in the administration papers of the Bet villages and chaks, not at present subject to river action, should be submitted for the Financial Commissioner's approval. along with that above called for; and the matter should be explained in your final report.

Copy of a letter No. 166, dated 18th August 1882, from T. G. WALKER, Esquire, Settlement Officer, Ludhiána, to the Settlement Commissioner, Punjab.

WITH reference to your No. 631, dated 22nd June 1882, I have the honour to enclose—

(1) Draft of conditions to be entered in clause 14 of the wajib-ul-arz of villages and alluvial chaks of which the assessments are liable to annual revision—(English).

(2) Draft of the entry to be made in section 14 of the wajib-ul-arz of all Bet villages not at present subject to the action of the river—(English).

(3) Two forms of tender of engagement for villages (*a*) of which the whole land is in the kacha circle, (*b*) in which only a portion or chak is so situated.—(These are in vernacular).

2. I think that it will be very much more convenient to refer in the term of engagement to the wajib-ul-arz, than to give any details in the former paper, as they would be out of place there.

3. I would request your attention to the last paragraph of I, in which I propose to give the Deputy Commissioner the power to remove a village from the kacha to the pakka circle. I think it is necessary that he should have this power, as well as that entered in II. When a village has ceased to be affected by the direct action of the river, its assessment ought to be fixed, and no room for further interference be given. It has been the past practice to go on altering the assessment for 8 or 10 years after the river had receded several miles from the village, merely because a field was better or worse cultivated in one year than in another.

I.—Draft of conditions to be entered in clause 14 of wajib-ul-arz of villages and alluvial chak of which the assessments are liable to annual revision.

This village is wholly (or partially) in the kacha Bet, and the agreement with Government is that (in the kacha chak) annually remission will be given for loss caused by the action of the river, and the assessment be enhanced on account of culturable land recovered from the river or of land situated in the kacha chak brought under cultivation. The assessment of the village shall be increased or decreased by the net gain or loss. Remission shall be given for land hitherto shewn in the papers as cultivated or culturable waste, that may go by diluvion or be rendered barren by sand, &c., ("regmar," "khalmár,") at the full revenue rate of the circle as given below.

Fresh land recovered from the river shall be assessed at the rates of the circle whether culturable waste or cultivated, and in the case of culturable waste situated in the kacha chak, which is brought under cultivation, the culturable rate shall be replaced by that on cultivation. But the assessment on newly cultivated land shall be progressive, thus—

One-quarter, the first year;
One-half, the second year;
Three-quarters, the third year;
Full rate on cultivation, the fourth year.

The full rate on cultivation is the ek-fasli revenue rate for the circle, and this shall not be exceeded.

Land now classed as ek-fasli shall not hereafter be assessed as do-fasli. Reductions may be given on account of do-fasli land where, owing to the direct action of the river, the land ceases to be of this quality. The ek-fasli rate shall be applied.

The assessment of the village or circle, calculated in the above manner, shall be deemed the revenue rate assessment of the village or chak for the year; but the assessing officer has the power to modify this assessment as he sees fit.

The revenue rates for the circle are as follows :—

Soil.	Rate per acre.			Rate per bigah, pakka.			Rate per bigah, kacha.		
	RS.	A.	P.	RS.	A.	P.	RS.	A.	P.
SAMRÁLA.									
Culturable waste	0	1	0	0	0	7½	0	0	2½
Ek-fasli	1	8	0	0	15	0	0	5	0
Do-fasli	2	10	0	1	10	3	0	8	9

If, at any time, the lands of the village cease to be subject to the direct action of the river, the proprietors may apply to the Deputy Commissioner to have the village transferred to the pakka circle, and the Deputy Commissioner shall have the power, if it appear that the village has been permanently removed from the direct action of the river, to transfer it to the pakka circle, and the assessment shall thereafter cease to be liable to annual revision. If subsequently the village again suffer loss from the action of the river, the Deputy Commissioner may, on application of the proprietors to this effect, transfer the village to the kacha circle.

II—Draft of condition as to di-alluvion to be entered in Bet villages not at present subject to the direct action of the river.

This village is at present entirely in the pakka Bet, and it will not be transferred to the kacha or alluvial chak list, or any alteration be made in its assessment on account of the action of the river, until it becomes necessary to give a reduction of its fixed assessment on account of such action. Whenever an application is made for the reduction of the fixed assessment of a village on account of river action, and the Deputy Commissioner finds it necessary to allow it, he can transfer the village, or part of it, to the kacha or alluvial chak list, and bring it under the rules applicable to the villages now on such list. The assessment of the village or chak shall then be fixed in the manner laid down in section 14 of the wajib-ul-arz of villages at present in the kacha or alluvial chak list.

Copy of Settlement Officer, Ludhianá's subsequent Note, dated 29th August 1882.

It will be extremely inconvenient to make the full entries on the tender of engagement. The wajib-ul-arz is a permanent portion of the settlement record, whereas a fresh tender is taken every year for the assessment of the alluvial chak. The tender of the first year of the new settlement will be bound up with the record, but it has effect only for that year. It would save endless trouble to refer in the tender of each year to a permanent clause in the wajib-ul-arz, and it is clearly much safer to do so than to run the risk of errors by an annual re-writing of the conditions. If reference is made to the wajib-ul-arz, the law would be sufficiently complied with.

2. Fairing of the records has already been completed in Samrála, thus the changes between measurements and the first year of the new assessment have been incorporated in the settlement record. The record is complete for the first year of the new assessment, and it is divided into two parts, kacha and pakka; that is, there is a separate khewat and a separate khásra for the kacha chak, and in copying the map a separate copy has been made for each chak. Thus there will be a completely separate record for the kacha chak on which the patwárí will work.

3. The annual assessments are reported to and sanctioned by the Financial Commissioner. As far as I know, they have always been brought on the fixed rent roll.

This appears clearly to be the intention of Financial Commissioner's Circular No. 47 of 1881 (dated 17th November 1881), wherein detailed instructions as to the "chak system" and the method of reporting the annual assessments are given (see para. 5).

4. It appears to me that these proposals re-open the question which was settled by the Financial Commissioner's orders on the Ludhiána assessment reports. In making these drafts, I have understood the position to be this, that the old system is to be continued with one or two modifications which were specified in paragraph 10 of the Financial Commissioner's review of Ludhiána report, and in the report itself. I have, therefore, drafted the conditions strictly on the old system as it appeared from the correspondence in the district office. I think it will be found that the drafts submitted with this office No. 166, dated 18th August, express the old conditions with the modifications now sanctioned. I have no doubt that the system laid down in these drafts will work well, and it has the great merit of simplicity.

5. I am very strongly of opinion that the system of progressive jamas accepted by the Financial Commissioner in his review of the Ludhiána reports the safest that we can devise. The zamindars clearly recognize that land does, as a rule, steadily increase in quality as it gets better tillage. I would point to the remarks of Mr. Kensington (quoted by the Settlement Commissioner) where he says "*They do most generally gradually improve,*" *&c., &c.* I have seen the Ludhiána district Bet for the last four years now, and I am certain that when new land has been steadily tilled for 4 years, it becomes clear and is as good as ever it will be. The land may be inferior in itself and not equal to bearing first class crops; but there is poor land in every village, and of this we do not take account in our assessments. We cannot gauge the quality of every field, and the tendency has been hitherto to reduce as much as possible the number of classes of soils, and take averages. If we allow the proposal, that the imposition of the full rate shall depend on the crop grown in the third year, I think we may as well have the whole assessment depending on an annual girdáwári. It would probably be as reliable for the whole of the land as for one-third of it.

As to the proposed change from quarter rates to third rates, I was induced to fix the lower rates by the considerations that the cultivator should be treated leniently on account of his trouble in breaking up the land, clearing away the "pilchi," &c., and this is often very considerable. I think that the extra year is not too much allowance to make for this.

6. In conclusion, I would again express my opinion, that it is a mistake to introduce anything approaching to an assessment depending on a gridáwári, or annual record of crops. Such a system is necessary where it is a question of a crop or no crop, and it has to be accepted where the harvest depends on the floods; but I think that it is generally accepted with the greatest reluctance; and in this district there appears to be the very slightest reasons for its introduction.

Copy of a letter No. 209 C., dated 20th September 1882, from the Secretary to the Financial Commissioner, Punjab, to the Settlement Commissioner, Punjab.

I AM directed to acknowledge the receipt of your letter No. 248, of 4th September, on the subject of the treatment of Bet lands in the Ludhiána district, and in reply to communicate the following orders and remarks by the Financial Commissioner.

2. In paragraph 6 of your letter you make proposals by which, Mr. Lyall remarks, you ask him to re-open all his orders on the whole question of the assessment of these Bet lands. The Financial Commissioner is not prepared to thus re-open the question, unless a strong case can be shown; and is certainly not prepared to do so as regards the Ludhiána district, where the settlement is almost at a close, and the papers of the Samrála tahsíl have already been faired. The Financial Commissioner's orders, as contained in paragraph 10 of his review of the Ludhiána report, No. 50 C. S., of 1st June, will therefore remain unaltered.

3. The question raised in your paragraph 2, as to the part of the settlement record in which the entries relating to the Bet lands should be incorporated is, in the Financial Commissioner's opinion, of very slight importance; as in Samrála they have been put in the administration paper, they should be put there also in the other tahsíls. A new engagement for the revenue will not be required annually.

4. Another question which has arisen is, whether the assessments of these Bet chaks are to be on or off the fixed rent roll. They should be retained on the fixed rent roll. Mr. Lyall admits that there is much to be said for taking the assessment of all alluvial chaks of riverain villages off the fixed rent roll, but no orders have been as yet passed to that effect, and he did not intend to treat Ludhiána exceptionally.

5. In paragraph 3 of your letter you raised a question as to how the records of these chaks are to be prepared, but, from paragraph 7 of your letter, it would appear that orders on the question are not necessary; the system which has been adopted is the right one.

6. It is proposed that, when alluvial chaks have been for five years unaffected by the river, the Deputy Commissioner may give them a fixed assessment. The Financial Commissioner agrees to this proposal.

7. The Financial Commissioner accepts for the whole district the way in which the Settlement Officer has carried out his orders by the entries made in the administration papers, of which a copy has been furnished with your letter; but there is one point on which he is doubtful. According to Mr. Walker's draft, the assessing officer is to have power to modify the assessment yielded by the rates as he thinks fit. With reference to this provision, I am to enquire whether it is intended that the assessing officer is to have power to go above as well as below rates? With the progressive rates for four years, and the maximum limit of the ek-fasli rate on new cultivation, and the power to reduce for damage caused by the direct action of the river, Mr. Lyall doubts whether the power of varying the rate of assessment is necessary. I am to ask for the submission of a further report on this point.

8. In conclusion, I am to remark that, though Mr. Lyall sees no necessity for altering his former orders as to Ludhiána, and is unwilling to do so owing to the inconvenience of a change now, he will consider any modifications of the system contained in those orders which you may wish to suggest, when the same subject comes up for other districts.

Copy of a letter No. 348, dated 15th December 1882, from Major E. G. Wace, Commissioner of Settlements and Agriculture, Punjab, to F. C. Channing, Esquire, Senior Secretary to the Financial Commissioner, Punjab.

In reply to paragraph 7 of your No. 209 C., dated 20th September 1883, I have the honour to forward copy of Settlement Officer, Ludhiána's No. 306, dated 6th instant, and to say that I propose, with Financial Commissioner's permission, to instruct the Settlement Officer to strike the following clause out of Draft I, forwarded with Settlement Officer's No. 166, dated 18th August 1883:—

"But the assessing officer has the power to modify this assessment as he sees fit."

Copy of a letter No. 306, dated 6th December 1882, from T. G. Walker, Esquire, Settlement Officer, Ludhiána, to the Commissioner of Settlements and Agriculture, Punjab.

I have the honour to reply to the enquiry in paragraph 7 of No. 209 C., dated 20th September 1882, from the Senior Secretary to the Financial Commissioner to your address, that, in my opinion, it is not necessary to give the assessing officer the power of departing from the rates sanctioned at regular settlement. I think that, when the assessment of an alluvial village or chak has been sanctioned in the revised settlement, the annual variations should be strictly according to rates.

Copy of a letter No. 153, dated 4th January 1883, from the Secretary to the Financial Commissioner, Punjab, to the Commissioner of Settlements and Agriculture, Punjab.

In reply to his No. 348, dated 15th ultimo, intimates that the Financial Commissioner accords him the permission asked for, to instruct the Settlement

Officer, Ludhiána, to make the proposed alteration in the draft administration paper.

Extract of paras 319-321 of Final Report on the revision of settlement of the Ludhiána district in the Punjab, by T. Gordon Walker, C.S., Settlement Officer.

System of alluvion and diluvion inquiry.

319. The method in which the annual inquiry for the assessment of lands, subject to the direct action of the river, is made, and the papers prepared in the course of this, require to be noticed in some detail. The system entered in the wajib-ul-arz of the villages at the regular settlement is that by which no action is taken where the increments or decrements are less than 10 per cent. of the whole assets of the estate; but in 1862 that known as the "chak" system was introduced by order of the Commissioner. Under this a separate tract is marked off, comprising the area that is likely, within a reasonable time, to be affected by the action of the river; and no notice is taken of changes outside of this. The line may be drawn so as to include a whole village or only a portion of it; in the latter case the part within the limit being called the *kacha*, and that without it, the *pakka*. In the tract thus marked off, all cases of changes due to the action of the river were taken up, and the assessment increased or decreased according to the result of the inquiry. In calculating the amount of assessment or remission the village rates of settlement were used, but the officer making the assessment was not bound to these, a general discretion being allowed of fixing what amount appeared suitable for the area to be assessed. As a rule, however, the result of the rates was adhered to. The chief faults that appeared on an examination of the working of this system were first, that the rates in many cases differed very much in adjoining villages. Thus, it did not matter if a very low rate were applied to the few acres making up the whole land of a village at the time of regular settlement; but when many hundred acres had been added and were assessed at this rate, because it was that of settlement, great inequalities resulted. In many cases the land of one village was found to be paying double as much as exactly the same quality of land in that adjoining. Secondly, land was assessed either as do-fasli or ek-fasli; and the question of which rate should be applied came to depend entirely on how the patwárí classed it. If two crops or one of sugarcane were raised in a field in any year, it was liable to be assessed at the higher rate and continued to be although never again so cultivated.

The same continued; limit of the kacha and pakka chaks.

320. The *chak* system has now been retained with certain modifications, the result of a great deal of discussion; and these I will next describe. The first step taken by us was to rearrange the line of delimitation, where this had become necessary on account of changes in the course of the river during the last twenty-five years. In doing this I endeavoured to meet the wishes of the people as far as possible, although it was not easy to satisfy them, and at the same time have a division that would last for even a short period. Outside of the limit new cultivation will not be liable to assessment during the term of settlement, just as in any other part of the district; and it is not until the people of a village are compelled to apply to have their lands, or the pakka portion of them, where there are two chaks, transferred to the kacha, that any account will be taken of changes in the area of cultivation. I think that it is this confining the inquiry to as small an area as possible that constitutes the strong point of the chak system. It is of course unavoidable that transfers from and to the kacha will hereafter become necessary as changes occur in the course of the river, for it would have deprived the system of its chief advantage if we had fixed such a limit as would be likely to last, without any alteration at all, for the term of the new settlement; but I do not anticipate any difficulty in meeting cases of this kind as they arise. The provisions sanctioned as to transfers to and from the kacha are, on the one hand, that, when a village with land in the kacha has for five years remained unaffected by the direct action of the river, the Deputy Commissioner may give it a fixed assessment; and on the other hand a village hitherto in the pakka may be transferred to the kacha on an application to the effect that it has become liable to such direct action.

Rules for assessment of land in the kacha.

321. The following principles of assessment were finally laid down after a good deal of correspondence:—

1. All culturable waste land to pay one anna an acre in its grazing aspect.

2. New cultivation to be assessed as follows:—

First year	one-quarter.	Of the ek-fasli rate sanctioned for the circle.
Second year	one-half.	
Third year	three-quarters.	
Fourth year	the whole.	

Uniform rates for each circle were thus introduced; and it was at the same time decided that the assessments given by them should be adhered to absolutely, the power of departing from them as he thought fit, which the assessing officer was allowed formerly to exercise, being withdrawn. It was thought advisable to provide that new cultivation should not, during the period of the revised settlement, be ever liable to bear the do-fasli rate. The loss to Government involved in this last provision is likely to be inconsiderable; and I think it was wise to deprive the subordinate officials of the power hitherto enjoyed by them in this respect. We have classed the Bet land very carefully with the crop returns of two or three years to guide us; this was done under very strict supervision, and the result is reliable. It would be too much, however, to expect that the patwárís and kanungos would do it properly from year to year. Reductions of assessment on account of abrasion or other injury will be given exactly by the soil rates, so that the assessment of a village or portion of a village in the kacha will be in any year the exact result of the revenue rates. The file of correspondence relating to this matter has been made over to the district office, and for further details I would refer to it. The conditions of assessment in villages liable, or likely to be liable to the action of the river will be found in clause 14 of the administration papers; and a vernacular set of instructions has been printed and distributed to the patwárís and supervising agency.

Papers as to Alluvial assessments of Jullundur and Hoshiarpur Districts.

Copy of a letter No. $\frac{1039}{8850}$, dated 12th September 1884, from the Senior Secretary to the Financial Commissioner, to the Secretary to Government, Punjab.

(1) This office to Settlement Commissioner, No. 10057, dated 30th November 1883.
(2) SettlementCommissioner's No. 91, dated 13th August 1884, and enclosure from Settlement Officer, Hoshiárpur.
(3) This office reply No. 6613, dated 3rd September 1884.

I am directed to submit for the information of Government, a correspondence as per margin, in which instructions have been issued to the Settlement Officers of Jullundur and Hoshiárpur for the assessment of lands affected by the action of the Beas and Sutlej rivers.

2. As the instructions finally issued are based on the procedure approved in your No. 1683, dated 25th November 1875, and on the orders issued by Colonel Davies in November last, the Officiating Financial Commissioner has thought himself justified in issuing them on his own authority, more especially as it was of importance to the Settlement Officers concerned to receive early orders.

3. The Officiating Financial Commissioner is under the impression that these instructions involve no new principle of assessment, but that they provide for the application of the principles before approved by Government by a more careful and reliable procedure.

Copy of a letter No. 10057, dated 30th November 1883, from the Senior Secretary to the Financial Commissioner, Punjab, to the Commissioner of Settlements and Agriculture, Punjab.

In passing orders on the Garshankar assessment report (which will shortly be communicated to you) the Financial Commissioner expressed an opinion that the question of the system to be adopted in making the annual alluvion and diluvion inquiry and assessments on the Hoshiárpur rivers would be now conveniently left for separate consideration. The subject was discussed in connection with the Sutlej Bet lands in paragraphs 15 and 68-70 of the Garshankar assessment report, and for the Beas lands in paragraph 44 of the Dusúya report and also in your reviews. The system to be adopted in Ludhiána

has formed the subject of a separate correspondence which ended with this office No. 209 C., dated 20th September 1882, to your address. I am now directed to convey the orders of the Financial Commissioner in the matter for the Hoshiárpur district.

2. There are two points on which a decision is required, of which the first is whether what is known as the "chak" system should be introduced. As to this, it is to be remembered that on the Ludhiána side of the Sutlej the "chak" system has always been in force, and the only question there was what improvements should be made in its working. On the Hoshiárpur side, on the contrary, the third of the three systems described in Book Circular No. XLII. of 1860, and referred to in Chapter D. II., paragraph 15 of the rules under the Land Revenue Act, of taking up every case where increment or decrement has happened, and altering the assessment according to the actual revenue of each field lost and the estimated value of each field gained has been in force. It was authoritatively laid down for observance in this division by the then Commissioner, Mr. Melvill, in a Circular No. 296, of 1st October 1860, (issued under the authority given by paragraph 5 of the Financial Circular quoted above), and detailed instructions for working the system were given in para. 4 of the Circular. Mr. Melvill, after remarking that where alteration of assessment, either for alluvion or diluvion is made, resettlement of the whole mahal is involved, added that the principle was only to be enforced in extreme cases of depression or the reverse, saying that—"ordinarily the increment or decrement alone will be taken cognizance of."

3. The point now to be decided is whether anything will be gained by introducing the chak system into this district. The question of the method of dealing with alluvion and diluvion inquiries best suited to the Punjab was carefully considered by this office in 1874, and after a very full enquiry the opinion of the then Financial Commissioner (Mr. Egerton) was communicated to Government in a letter No. 70 of the 15th January of that year. The conclusions at which he arrived are given in paragraphs 5 and 6 of that letter, and were as follows. After stating that there was always a large preponderance of opinion in favour of the third system of taking up every item of increase and decrease, Mr. Egerton went on to say that this system was, in his opinion, the most fair to the people. "The chak system," he wrote, "is inapplicable, except where there is a well-defined bank, which can be adopted as the limit of the chak, not liable to invasion by the river; and this in the Punjab is seldom or ever found. The result is that the limits of the chak are constantly changing; and either the anomaly arises of extending the inquiry beyond the area fixed on as its limit, or else tracts are excluded from enquiry where extensive alluvion or diluvion may have occurred." The letter went on to show that the 10 per cent. rule was inapplicable to the circumstances of the Punjab; and in the next paragraph the Financial Commissioner stated that, from the above facts and considerations, "it should be the aim of the revenue administration to introduce the system of taking up every item of increment and decrement as opportunity presents for doing so." Another consideration points to the adoption of the system, *viz.*, the desirability of effecting uniformity of procedure in the different districts, and also on opposite sides of the river. The only system which could be generally introduced is the third system above alluded to, and this object can therefore only be effected by its general adoption. The Financial Commissioner, after considering in detail the different cases in which a discrepancy of procedure exists in the same districts and on opposite sides of the same river, "believes that there will be no difficulty in ensuring uniformity of practice in these important respects."

These views recommended themselves to the Punjab Government, and in their letter No. 1683, of 25th November 1875, the Financial Commissioner was requested to issue instructions which would provide for the gradual introduction upon the large rivers of the province, of the system of taking up every case of alluvion and diluvion as it occurs, wherever the village proprietors might consent to its substitution for any other system then in force. So far as Colonel Davies can learn, these orders were not communicated to your office, and you do not appear to have been aware of their existence. A copy of the printed correspondence is now forwarded for your information.

4. The question whether the chak system should be introduced into the Garhshankar Bet has been carefully considered by Mr. Kensington in paragraph 15 of his assessment report, and the reasons which he there gives against it are, the Financial Commissioner thinks, very strong. They are that the area flooded by the river is small, the river bank being for the most part high and well-defined, that where this is the case the whole of the land up to the river bank is "pakka"; and though this land may be cut away, it is not liable to alteration in quality from year to year; that where this is not the case the area liable to inundation is constantly shifting, so that even if the present "kacha" area is accurately marked out no one can say that this will represent the alluvial chak of five years hence. On the other hand, if so large an area is demarcated that the whole tract which is liable to become "kacha" in any reasonable time be included, (*a*) the tract will either be unnecessarily large as representing existing facts, and if the whole area is to be reassessed every year there will be much unnecessary trouble and uncertainty; or (*b*) the tract so formed will practically include the whole of each border village and the chak system will then cease to exist. You reply to this, in paragraph 40 of your review of the report, by saying that the boundaries of the alluvial chak could be altered from time to time and so laid out as only to include lands which for the time are subject to erosion or annual flooding. But this it seems to Colonel Davies, instead of being an argument in favour of the system condemns it. The settlement record has to be made out on the supposition that the alluvial chak is a permanent division of the village. But in practice this arrangement cannot be maintained, and as changes are wrought by the river, what was "pakka" before becomes "kacha," and *vice versâ*. This seems to the Officiating Financial Commissioner a very troublesome system to work; especially if no decided advantage is obtained. Colonel Davies doubts also if that part of the system which involves the periodical shifting of the boundaries of the chak would be intelligently carried out by the ordinary district revenue establishment.

5. The arguments against introducing the chak system into the Dasúya Bet are, the Officiating Financial Commissioner thinks, even stronger; for there, as stated by Captain Montgomery in paragraph 44 of his assessment report on this tahsíl, practically *the whole Bet area is liable to flooding*. Since this question came up for consideration, Colonel Davies has had opportunities of further consulting both these officers, and both are decidedly of opinion that the alluvial chak system is not suitable to the circumstances of the villages on the Sutlej and Beas in this district. From what Colonel Davies himself saw of them, while Commissioner of Jullundur, he entirely concurs in these views; and having regard to the orders of Government passed on the general question in 1874, no change should, he thinks, be made in the existing system, and all that seems to the Financial Commissioner to be required is to improve the working of it.

6. The second point for decision, whether a fluctuating system of assessment, based on the crops grown, shall be introduced into the Bet villages, is fully discussed in paragraph 68 of Mr. Kensington's report on the Garhshankar tahsíl, and paragraph 44 of Captain Montgomery's report on the Dasúya tahsíl. Both officers write most strongly against it on the ground that it would be harassing to the people, would throw them more than ever into the hands of the patwári, and would be liable to great abuse by the inferior revenue establishment, and would lead to fraud on the part of both the Government officials and the agriculturists. A system of perpetually recurring settlements cannot fail to be harassing to the people and demoralising to all engaged in the operations: and Colonel Davies concurs with Mr. Lyall (paragraph 10 of the review of the Ludhiána and Jagráon assessment reports) in thinking that a system of this kind should only be extended to tracts where it is actually necessary. Colonel Davies does not think it is in any way necessary here, and on the whole he prefers the proposals made by Mr. Kensington and, with some modifications, approved of by Captain Montgomery. These are that, as a rule, the *inquiry should be confined to the area actually affected by the action of the river*, and that a few simple rules should be laid down for the guidance of the officers who will be employed in revising the assessments.

7. The rates proposed by both officers are as follows :—

		Rs. A. P.	
(1).	For land newly thrown up and sown with certain inferior crops	0 12 0	per acre.
(2).	For other crops, not including sugarcane, if only one crop is grown	1 8 0	"
(3).	For sugarcane and double crop land, except when one of the crops belongs to class (1)	2 4 0	"

Differing from Mr. Kensington, Captain Montgomery would not put any rate on culturable land which may not be cultivated; but on the other hand he would impose the above rates on all land brought into cultivation, whether affected by the river or not; whereas Mr. Kensington would only assess such land, when a change in their condition is brought about by river action. On these points the Officiating Financial Commissioner is inclined to accept Captain Montgomery's proposals, but he would remark that the practical effect of the application of the two systems would not, he believes, be very different, as the changes which take place in the area under cultivation in these river villages are almost entirely due to the action of the river, and this is especially the case in the Dasúya Bet where the whole area of the villages in the tract is liable to flooding. As to the rate Rs. 2-4 for sugarcane and double cropped land, there is, Colonel Davies thinks, no valid objection to retaining it, and he therefore sanctions the Settlement Officer's rate as a whole.

8. Both officers suggest that a register should be kept showing all fields assessed at the lower rates, and that these fields should be inspected every year. The suggestion, I am to state, is a good one and should be adopted, and on this and some other points the Officiating Financial Commissioner desires that you will draw up a set of rules, in consultation with the Settlement Officer, for the guidance of the Deputy Commissioner and his assistants, on the assessment of villages liable to be affected by river action in this district.

Copy of a letter No. 91, dated Simla, 13th August 1884, from Lieut.-Col. E. G. Wace, Commissioner of Settlements and Agriculture, Punjab, to R. G. Thomson, Esq., Offg. Senior Secretary to the Financial Commissioner, Punjab.

On receipt of your No. 10057, dated 30th November 1883, I forwarded the complete correspondence to the Settlement Officers of Jullundur and Hoshiárpur; and invited proposals in the sense of paras. 5 to end of that letter. In reply, I received from the Settlement Officer of Jullundur the enclosed letter No. 86, dated 21st March 1884, and enclosures; and about the same time the Settlement Officer of Hoshiárpur forwarded to me similar, but slightly different, proposals.

2. On comparing the replies of these two Settlement Officers I found that they differed only on minor points; and I therefore requested them to meet, and to submit, if possible, joint proposals, stating one system which should apply equally in the Hoshiárpur and Jullundur districts to all land affected by the action of the Beas and Sutlej rivers. The result of this joint consultation is stated in Captain Montgomery's enclosed letter No. 85, dated 1st July 1884, and appendices.

3. Captain Montgomery in this letter submits, on his own behalf and Mr. Purser's:—

(*i*) Draft conditions of assessment for insertion in the tender of engagement of all villages exposed to the action of the Beas and Sutlej rivers in the Hoshiárpur and Jullundur districts.

(*ii*) Instructions to patwárís and other revenue officials for the preparation of the papers in which the annual action of these rivers will be brought to record.

4. These instructions (ii) I hold back for the present. They are very similar to those, which you will find appended to Mr. Purser's No. 86, dated 21st March (enclosed); Mr. Purser has taken much pains with them, and in substance they are all that can be desired. But as a guide to the lowest classes of our revenue officials I doubt whether they are sufficiently concise and clear. In some respects I do not myself easily follow their meaning. For these reasons I propose to endeavour to reduce them to a simpler form, and as they are within my own power of sanction, I presume that I need not trouble the Financial Commissioner further in respect of them.

5. The draft conditions of assessment require the sanction of the Financial Commissioner, both because they state the system of assessment and the rates to be enforced, and in compliance with the orders contained in para. 2 of the Government's No. 1078, dated 5th November 1880. I think that these conditions have been drawn up very carefully, and that they are stated in the terms and form which will be most easily understood by the lambardárs, patwárís and revenue officials. I only recommend two changes :—

(1st) in the preamble and in the first paragraph, thus :—

In place of the following words—	Read the following—
"We accept the following conditions in respect of the re-assessment of land exposed to river action. 1. "It will be for the authorities to decide what such land is."	1. In this Mauza the whole land (or a stated part, giving boundaries and area,) is exposed to the action of the (Beas or Sutlej) river, and we accept the following conditions of assessment in respect of that land and of all other land hereafter affected by the river.

(Secondly) I would add the following after paragraph 4.

"Whenever land paying revenue is injured by action of the river, a remission shall be given in proportion to the injury, if in any such case the whole revenue is not remitted. The amount retained shall be fixed with reference to the rates stated in paragraph 3."

6. The system laid down in these conditions of assessment, stated in less formal manner than is there done, is as follows :—

(i). Increase of revenue will be taken, and decrease will be allowed for all changes caused by the action of the river.

(ii). The nature of these changes will be valued by the produce actually yielded by the lands affected.

(iii). It will be taken for granted, in respect of all lands exposed to river action, that when land before uncultivated is brought under the plough, this improvement is due to the action of the river.

I trust that we have in these respects correctly understood the orders conveyed in paragraph 7 of your letter under reply.

7. As both Mr. Purser and Captain Montgomery will very shortly enforce the new assessments of their districts, I solicit very early orders on this reference.

Copy of a letter No. 85, dated 1st July 1884, from Captain J. A. L. Montgomery, Settlement Officer, Hoshiárpur, to the Commissioner of Settlements and Agriculture, Punjab.

In accordance with demi-official instructions received from you I went to Jullundur on the 13th instant, and consulted with Mr. Purser, the Settlement Officer of that district, regarding the rules that should be observed for the future in alluvion and diluvion enquiries on the Sutlej and Beas rivers in the districts of Jullundur and Hoshiárpur. I have now the honour to forward copies of (*a*) the tender of engagement which it is proposed to take from villages subject to river action, (*b*) the rules which should be followed in the alluvion and diluvion inquiries; and hope that they will be approved.

2. A few explanatory remarks are necessary. In the tender of engagement we have entered a clause exempting land cultivated at settlement, and assessed as such from further enhancement of revenue. But if such lands are deteriorated, and their assessment is reduced under the new rules, they will afterwards be liable to enhancement of revenue under the rules.

3. A necessary part of our work will be to decide what villages, whether in whole or part, are to be subject to these rules. In the Hoshiárpur district, as a rule, whole villages will be entered in the list; but in the Jullundur district there are a number of villages, parts of whose area are on the well defined high bank "dhaha," and part on low ground subject to river floods. And it is necessary that new cultivation on land not subject to river flood should not be liable to assessment under the rules.

Draft conditions to be inserted in the Tender of Engagement of all villages of the Hoshiárpur and Jullundur districts exposed to the action of the rivers Sutlej and Beas.

We accept the following conditions in respect of the re-assessment of land exposed to river action.

1. It will be for the authorities to decide what such land is.

2. No land existing at Settlement shall be liable to pay a higher revenue than has been put on it at the Settlement Bách except under the following circumstances :—

(1) Land uncultivated at settlement, if afterwards cultivated, shall be liable to assessment at the rate given below for the crop grown.

(2) Land uncultivated and not fit for grazing at settlements, may be charged with the grazing rate given below, if by action of the river such land becomes fit for grazing.

(3) Land uncultivated, but fit for grazing at settlements, shall not be charged with any grazing tax, unless, after having been rendered unfit for grazing by action of the river, it has again become fit for grazing by the action of the river.

(4) Cultivated land may be charged with a different revenue to that imposed on it at the settlement bách, if such settlement revenue has subsequently been reduced on account of deterioration of soil due to river action. In such case the revenue imposed shall be that given below for the crop grown :—

3. The following rates only will be applied in future assessment during the term of settlement :—

	Per acre.			Per gh.		
	Rs.	A.	P.	Rs.	A.	P.
I For uncultivated land fit for cattle grazing	0	1	0	0	0	9
II For land sown with poor rice (khársu) swánkh, máh, methí, kehn charál, mattar, linseed, masar, barley, masar and barley mixed	0	12	0	0	9	0
III For land sown with crops other than the above, not being sugarcane, if only one crop is grown in the year, or if two crops are sown when one or both of them belong to the class mentioned in clause II.	1	8	0	1	2	0
IV For land sown with sugarcane or with two crops in the year, except when one of the crops belongs to the class mentioned in clause III. ...	2	4	0	1	11	0

4. No reduction of assessment shall be claimable on the ground that no crop is grown, or that the crop is charged in the above scale with a rate lower than the existing assessment, unless the absence of cultivation or the growing of such crop has been necessitated by deterioration of soil due to the action of the river.

Copy of a letter No. 6613, dated 3rd September 1884, from Senior Secretary to the Financial Commissioner, Punjab, to the Commissioner of Settlements and Agriculture.

In reply to your letter No. 91 C., dated 16th August 1884, in which you submit draft conditions of assessment which will be inserted in the new engagement of villages of the Jullundur district and of tahsíls Dasúya and Garhshankar, which are affected by the action of the Beas and Sutlej rivers, I am directed by the Officiating Financial Commissioner to sanction the conditions of assessment proposed in the Settlement Officer of Hoshiárpur's No. 85, dated 1st July 1884, with the modifications and additions recommended in paragraph 5 of your letter under reply. These conditions appear to express correctly the orders stated in my No. 10057, dated 30th November 1883, to your address.

2. The enclosures of your letter are herewith returned, but Settlement Officer, Hoshiárpur's No. 85, dated 1st July 1884, should be forwarded to me at once to complete the file of this office, as the papers have to be submitted to Government.

3. I am also to request that the Settlement Officers of Jullundur and Hoshiárpur may be directed to agree upon a translation of the conditions of assessment now sanctioned, and that this translation may be submitted for record in this office. It should be in biglot form, English on one side and the vernacular (Roman Urdu) on the other. The orders of Government in connection with previous cases of the same kind require the Financial Commissioner to satisfy himself that such conditions are correctly incorporated into the village papers, and this cannot be known unless, they are submitted in vernacular as well as in English.

Letter No. 424, dated 30th September 1884, from Lieutenant-Colonel E. G. Wace, Commissioner of Settlements and Agriculture, Punjab, to the Senior Secretary to Financial Commissioner, Punjab.

In reply to para. 3 of your No. 6613, dated 3rd instant, I have the honor to inclose—

(1) A vernacular translation of the conditions of assessment applicable to the Beas and Sutlej villages of the Jullundur district and Tahsíls Garhshankar and Dasúya, written in the Roman character.

(2) A biglot transcript, showing the English conditions on one side, and the translation on the other side in Roman Urdu.

2. I also submit copy of para. 3 of a letter No. 143, dated 25th September, from the Settlement Officer, Hoshiárpur, pointing out an error of copying in the draft originally submitted by him with his No. 85, dated 1st July last. This escaped my notice when I submitted the conditions with my No. 91 C., dated 13th August last, and I request the favour of your correcting the Settlement Officer's original draft accordingly,

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Copy of para. 3 of a letter No. 143, dated 25th September 1884, from Settlement Officer, Hoshiárpur, to Deputy Commissioner of Settlements, Jullundur.

3. The word "cultivated" in para (2) of the conditions is evidently a mistake; the word should be "uncultivated," and this has been written in the paper now sent. I should also mention that as the intention evidently is that the rates should only be charged on crops which have come to maturity, I have so expressed it in the vernacular.

English.

Draft conditions to be inserted in the tender of engagement of all villages of the Hoshiarpur and Jullundur districts exposed to the action of the rivers Sutlej and Beas.

In this mauza (the whole land or a stated part, giving boundaries and area,) is exposed to the action of (Beas or Sutlej) river, and we accept the following conditions of assessment in respect of that land and of all other land hereafter affected by the river.

2. No land existing at settlement shall be liable to pay a higher revenue than has been put on it at the Settlement Bách except under the following circumstances :—

(1) Land uncultivated at settlement if afterwards cultivated shall be liable to assessment at the rate given below for the crop grown.

(2) Land uncultivated and not fit for grazing at settlement may be charged with the grazing rate given below, if by action of the river such land becomes fit for grazing.

Translation.

Sharait jo izlae Hushiarpur wa Jallandhar ke tamam un dehat ki darkhast malguzari men draj hongi jinko sadma dariyae Bias ya Satlej se pahunchta hai.

Maúza háza meṉ kul zamín ko (yá agar kisí hisse ko nuqsán pahuṉchtá ho to us raqbe ki tafsíl baqaid hadúd wa tadâd-i-raqba biyán ki jáwe) dariyae (Sutlej yá Biás) se sadma pahunchtá hai islie ham malikán dek nisbat tashkis irázi mazkúr aur níz tamám ún iráziât kí jisko áindá daryá se nuqsán pahúnche sharáit mufaslazail baráe manzurí sarkár pesh karte haiṉ.

2. Jo irázi waqt bandobast ke máojud hai uspar muámlá záid az bách bandobast ke izád nahin kiá jáwega siwáe basúrat mundarjazail :—

(1) Jo zamin waqt bandobast ke ghair-mazrúá hai agar aiṉda kásht kijáwe uspar parta mundarjá dafa 3 hadayat házá mutáliq jins kásht shúdá lagáya jáwegá.

(2) Jo zamin waqt bandobast ke ghair-mazrúá thí aur charáṉd maweshí ke bhí láiq na thí áiṉda agar tásir dariyá se láiq charánd ke hojáwe uspar parta charáṉd mundarja dafa 3 lagáya jáwega.

English.

(3) Land uncultivated but fit for grazing at settlement shall not be charged with any grazing tax unless, after having been rendered unfit for grazing by action of the river, it has again become fit for grazing by the action of the river.

(4) Cultivated land may be charged with a different revenue to that imposed on it at the Settlement Bách if such settlement revenue has subsequently been reduced on account of deterioration of soil due to river action. In such case the revenue imposed shall be that given below for the crop grown.

3. The following rates only shall be applied in future assessments during the term of settlement :—

Translation.

(3) Jo zamín waqt bandobast ke ghair-mazrúá láiq charánd ke hai illa bách bandobast men koi parta charand uspar muqarrar nahin huá aisí zamín par partá charánd áindá muqarrar nahin hogá taw-aqte ki sadmáe dariya se nuqsán hokar azsarnao tasir daryá se láiq charánd ke nahojáwe.

(4) Agar babáis nuqsán dariya zamin mazrúá bandobast ki haisíat náqis hojáwe aur múámla us nuqsán ke liház se kam kiya gaya ho to bádazan baliház tásir dariya múámla us zamin ká mutáliq parta múndarjá dafá 3 ke muqarrar hosaktá hai.

3. Kám tashkhís áindá men tá bandobast sáni partáhá zail par ámal hoga.

	Per acre. Rs. A. P.	Per. gh. Rs. A. P.
(1) For cultivated land fit for cattle grazing ...	0 1 0	0 0 9
(2) For land sown with poor rice (kharsu) swánk máh, methí, kehn, charál, matar, linseed, masar, barley, masar and barley mixed	0 12 0	0 9 0
(3) For land sown with crops other than the above, not being sugarcane, if only one crop is grown in the year, or if two crops are sown when one or both of them belong to the class mentioned in clause II.	1 8 0	1 2 0
(4) For land sown with sugarcane or with two crops in the year, except when one of the crops belong to the class mentioned in clause II.	2 4 0	1 11 0

	Fi acre. Rs. A. P.	Fi gh. Rs. A. P.
(1) Irázi ghairmazrúá qáhile charánd	0 1 0	0 0 9
(2) Irázi jispar náqis cháwal (misal kharsu) sawánk, másh, methí, kehn, charál, matar, alsi, masar, jao, jao masar kásht húâ ho ...	0 12 0	0 9 0
(3) Irázi jispar dígar qisamkí jins boíjáwe aur jo sharáh chahára mím-darj azail men dákhil naho	1 8 0	1 2 0
(4) Irázi jismen kamád kásht ho ya jismen 12 mah men do-fasl kásht howe aur minjumla do-fasl mazkur ekfasl us kisi jins ki naho jiski tafsil sharáh do men biyán ki gai hai	2 4 0	1 11 0

4. No reduction of assessment shall be claimable on the ground that no crop is grown or that the crop is charged in the above scale with a rate lower than the existing assessment, unless the absence of cultivation or the growing of such crop has been necessitated by deterioration of soil due to the action of the river.

5. Whenever land paying revenue is injured by action of the river, a remission shall be given in proportion to the injury, if in any such case the whole revenue is not remitted, the amount retained shall be fixed with reference to the rates stated in para 3.

4. Jis zamin ko bách bandobast men yá batámil dafá 2 wa 3 Jamá lagchuki ho us Jamá ki takhfif badin wajá di nahin jawegi ki kísí sál men jins kásht nahin hui yá badin wajá ki jins kásht shuda banisbat partá ke adná thi albatta agar tasir dariyá se amal mazkúr pesháyá ho to beshak takhfif muámlá ke dijáwegi.

5. Jabkabhi irázi dákhil málguzái ko sadmá darijá se nusqsán ho jáwe to bamiq-dár nuqsán Jamá men mááfi dijawagi aur agar kisi aisi súrat men kúl Jamá ki mááfi deni manzúr naho to tadád us raqam ke jo bahál rathi hai bazaria partáhá mindarja dafá 3 ke tajwiz kijáwegi.

No. 108, dated Lahore, the 20th May 1885, from H. C. Fanshawe, Esquire, Offg. Junior Secretary to Government, Punjab, to R. G. Thomson, Esquire, Offg, Senior Secretary to Financial Commissioner, Punjab.

In continuation of my letter No. 107 of to-day's date, I am directed to convey the approval of the Lieutenant-Governor to the rules issued by the

Financial Commissioner for the assessment of lands affected by the action of the Beas and Sutlej rivers in the Jullundur and Hoshiárpur districts, which were forwarded to this office under cover of your letter No. 1039 of 12th September last.

2. The working of these rules should be carefully watched by the Deputy Commissioners concerned and should be noticed from time to time by the Financial Commissioner in the Annual Revenue Report of the Province.

Instructions for Preparing the Annual Alluvion and Dilluvion Papers in Hoshiarpur.

1. The following papers have to be prepared in a village affected by river action, or by sand drift, or by *chohs.*

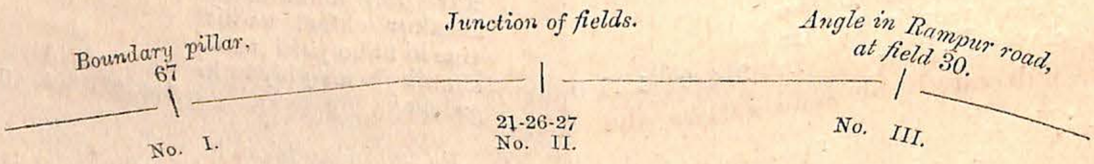
A.—Map.
B.—Field Index of Diluvion.
J. —Do. of New Cultivation and Change of Class.
D.—Abstract Statement of Changes with orders passed thereon.
H.—Khewat of Changes.

These papers will be prepared according to the instructions given below :—

THE MAP.

2. If *alluvion* has occurred.

(*a*) Copy on a new sheet from last year's map *fixed points* as close to the river as possible. By fixed points are meant points which can be easily identified on the spot without any measurements, and these will be mostly boundary pillars, or the junction of three or more fields, or angles in a road. It is absolutely essential that these points should be easily identifiable by a stranger who has only the map to help him, for if a wrong spot is assumed the whole new map will be wrong. The points taken should be about half a mile apart. If the nearest fixed points are not in the settlement field map, the boundary line should be protracted inland so as to meet the boundary line of the settlement map, in order that reference may not be necessary to more than two maps at most. The fixed points should be joined on the paper by pencil lines, and the position of each point on the map should be written opposite that point on the paper thus :—



(*b*) Then by Chandábandi and offsets complete the boundary up to the river so as to include up to the deep stream or other river boundary.

(*j*) Then measure the new fields.

3. If *diluvion* has occurred.

(*a*) Act as in the previous case.

(*b*) But add by copying from the last year's map the fields washed away, and colour them blue if the river is running over them, yellow if they are sand. The boundary of such fields should be drawn in fine broken lines (— — — — — — — —).

(*j*) The map thus made will show the injury which has been done.

(*d*) When land is lost to a village through diluvion it will not be necessary to show in the map the land which is no longer considered part of the village.

4. *Khalmar.*—(*a*) Copy the fields on each side of the khál which have not been injured.

(*b*) Then proceed as in previous paragraph 3.

5. *If alluvion and diluvion and khálmár have all occurred.*

Make one map, and show on one map all the results in the manner above directed.

6. *General Instructions.*—(*a*) Always be careful to show correctly the position of the deep stream; measure right up to it.

(*b*) If the deep stream is not the boundary, measure right up to the boundary wherever it is situate in the Bet.

(*j*) Draw a thin red line round all new alluvion and a green line round all land newly cultivated.

(*d*) In cases of alluvion, when the limit of the old land is reached it will be necessary to fix the boundary of the new land between adjoining villages. This should be done by consent of the parties, and the more importantpoints be marked by rough pillars. If the parties cannot agree, the Patwári must use his own discretion till the inspecting officer deputed by the Deputy Commissioner can pass orders on the dispute, which should be reported as soon as possible. Lines of adjoining villages are not to be measured separately by the respective patwáris, whoever maps the line first is to give a tracing of it to the other Patwári, who must accept it till some superior officer sets it aside. All land, whether cultivated or not, which accretes to a village must be shown in the map in the year it appears.

7. *Khasrás.*—There will be two Khasrás.

B.—Of Diluvion.

J.—Of Alluvion and Change of Class.

Forms B. and J. are appended with instructions (which see.) These Khasrás should be filled in at the same time as the Patwári does the measurements. If the Patwári is doubtful about any entries of class in Khasrá J. he can write such entries in pencil, and ask for orders when the Kánungo or Tahsíldár arrives.

8. In the column *soil* land will be described as *Cháhi*, *Nahri*, *Sailáb*, *Baráni*, *Charánd*, *Banjar*, *Ghairmumkin*, or *Zer-áb*. No other kind of soil will be entered. In the column *revenue class* will be entered the class in which the land was assessed or should be assessed. See copy of conditions of assessment in Appendix W.

9. When making new survey numbers, denote them under new numbers; but if they are part of old land denote by supplementary numbers. Thus if the last former number is 200, and a new piece of land is thrown up it will be shown as 201. But when the land thrown up was formerly carried away, the old number will be added too. Thus if No. 175 is washed away and subsequently appear again, and the last number in the Khasra is 200, the new land will be shown as 201—175. But if next year part of this land remains sand and part is cultivated the sand will be shown as 201—175, and the cultivation as $\frac{1}{201-175}$.

10. *Abstract Statement of Changes* (*Milán Khasrá burd barámad.*)—As soon as the Patwári has finished his measurements, he will at once draw out an abstract statement in form D appended, and will fill in columns 1—16 in pencil.

11. When the Tahsíldár has tested the measurements, the Patwári will, under his directions, complete form D, and obtain the Tahsildár's signature to that form. The Tahsíldár's remarks will be entered on the back of form D, under the following heads:—

(*a*) Brief details of area and jama of preceding year.

(*b*) Details of changes of area in present year.

(*j*) Proposals of assessment.

12. The Patwári will then take for his own use a copy of the map he has made and of the Khasrás and abstract statement, and give the originals to the Tahsíldár.

13. If the Deputy Commissioner or Assistant Commissioner or Extra Assistant Commissioner when finally inspecting the work alters the Tahsíldár's recommendations, the Patwári will correct his copies accordingly.

14.—*Khewat of Changes.*—When orders have been passed by the Deputy Commissioner or his Assistant, the Patwári will at once present to the Tahsíldár two copies of the *Burd Barámad Khewat* in form H, the Tahsíldár will see that the Khewat correctly applies to the orders issued, and will file one copy and return the other (after signing it) to the Patwári. The Patwári will then give a memo. of the result to each Khewatdár concerned, and prepare the Bách paper accordingly.

15. Appendix W. gives a copy of the conditions of assessment which apply—

(1) To villages on the Beas and Sutlej.
(2) To villages affected by the Bein, or by the Sohans, or by *chohs*, or by sand drifts.

16. Every cultivated field, which by reason of these conditions of assessment is at any time assessed at less than the highest rate should be entered in a register immediately the Tahsíldár so assesses it; and in this register the crops grown and the rates charged from year to year will be entered in regular order until the full rate is charged, or the field is no longer fit for cultivation. When this happens, a brief entry will be made against the field in this register thus, *Sálim Parta*, or *Burd*, or *Ghairmumkin*. For form of this register see Appendix Z. The Patwári will keep a separate register for each village.

Tahsíldárs and other officers when inspecting di-alluvion work will examine all fields entered in this register as assessed at less than the full rate. A copy of this register showing all fields still under inspection, including the fields newly assessed in the current year, must be attached to the di-alluvion file.

17. The entire returns both Vernacular and English, should be submitted to the Tahsíl and to the Financial Commissioner in Ghumáos. It is not necessary to convert any figures into acres, excepting only the total of each tahsíl, and the total of the district.

APPENDIX A.

The Map.—No instructions needed. If possible, Lucknow Mill paper should be supplied; and all copying work should be done by tracing (on the tatti) not by pricking of pins.

APPENDIX B.—*Diluvion Khasra.*

1	2	3	4	5	6	7	8	9	10	11	12	13	14
							LAND REMAINING.			LAND LOST.			
							Dimensions.						
Serial No.	No. of holding.	Khasrá No.	Taraf or Patti.	Owner.	Tenant.	Former area. Kanals	E. W.	S. N,	Area.	Area.	Soil (Kism Zamin)	Revenue class (Kism parta.)	REMARKS.

NOTE.—(1) If any of the diluviated land becomes shamilat and remains in the village, enter the words "*burdi dhákhil shámilát*" in the column of remarks, and form this land on the map into new numbers, drawing their limits in plain black lines, and entering the new numbers in large figures on the map.
(2) Total column 11, and under the total show details of soil and class.

APPENDIX J.—*Khasrá of Alluvion and Changes in class* (*baramad wa tabdil haisiyat*).

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
						DIMENSIONS.			FORMER.		PRESENT.				
												Crop.			
Serial No.	No. of holding.	Khasrá No.	Taraf or Patti.	Owner.	Tenant.	E. W.	S. N.	Area.	Soil.	Revenue class.	Soil.	Kharíf.	Rabí.	Revenue class.	REMARKS.

NOTE.—In this Khasrá will be entered all land newly accreted, whether revenue will be charged on it or not; also all land, other than burdi, of which it is proposed to alter the assessment.

APPENDIX D.—*Abstract Statement of Changes (Milan Khasrá Paimaish Burd buramad) ascertained at end of Kharíf, St.* 1941 (*A.D.* 1884).

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
				OLD LAND CHARGED AT RATES FIXED IN SETTLEMENT KHEWAT.		LAND CHARGED WITH A NEW RATE SINCE SETTLEMENT.							REVENUE NOW ASSESSED FOR NEW AGRICULTURAL YEAR.			DIFFERENCE BETWEEN COLUMN 14 AND COLUMN 16.	
Alphabetical No.	Name of village.	DETAIL.	Land not assessed.	Area.	Amount.	Class IV, @ 27 annas per ghumao.	Class III, @ 18 annas per ghumao.	Class II, @ 9 annas per ghumao.	Class 1, @ 9 pies per ghumao.	Total revenue and area of new land.	Total area.	Total revenue.	For the Kharíf, St. 1941.	For the Rabí, St. 1942.	Demand for Kharíf, St. 1941, previously entered in Tahsíldár's Rent Roll.	Excess to be collected.	Deficiency not to be collected.
			Gh. K.	Gh. K.	Rs. A. P.	Gh. K.	Gh. K.	Gh. K.	Gh. K.	Gh. K.	Ghs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
		By last year's papers ending Rabi, St. 1941.															
		DEDUCT. 1.—Diluvion.															
		2.—Land of which rate has been changed for better.															
		3.—Do., for worse.															
		TOTAL ...															
		ADD. 4.—Alluvion.															
		5.—Land of which rate has been changed for better.															
		6.—Do., for worse.															
		TOTAL ...															
		Area and revenue ascertained for Kharíf St. 1941 and Rabi, St. 1942.															

NOTE.—(1). In columns 7—10 enter revenue of each class under the areas, and in column 11 put totals of both areas and revenue.

(2). In Villages where inquiry is made for injury or otherwise from *chohs*, &c., the columns 7—10 will be altered according to the village rates.

Appendix H.—*Alluvion and Diluvion (Burd buramad) Khewat, prepared at end of Kharif,* (*St.* 1941=*A.D.* 1884.)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
					Former.			Present.			Difference.			
Khewat No. in last Jamabandi.	Khatauni No.	Name of Khewatdár, Including name of tenant where necessary.	Amount of revenue of each holding according to last year's papers.	Khasrá No.	Area.	Rate.	Revenue.	Area.	Rate.	Revenue.	Increase.	Decrease.	Amount of revenue for each holding for new year.	REMARKS.

Note.—Each field in which any change has taken place should be shown separately and all columns filled up for it separately.

APPENDIX W.—(1) *Conditions applying to Villages on the Beas and Sutlej Rivers.*

1. In this Mauza (the whole land or a stated part, giving boundaries and areas) is exposed to the action of the (Beas or Sutlej) river, and we accept the following conditions of assessment in respect of that land and of all other land hereafter affected by the river.

2. No land existing at settlement shall be liable to pay a higher revenue than has been put on it at the Settlement Bách except under the following circumstances :—

(1) Land uncultivated at settlement if afterwards cultivated shall be liable to assessment at the rate given below for the crop grown.

(2) Land uncultivated and not fit for grazing at settlement may be charged with the grazing rate given below, if by action of the river such land becomes fit for grazing.

(3) Land uncultivated but fit for grazing at settlement shall not be charged with any grazing tax unless after having been rendered unfit for grazing by action of the river, it has again become fit for grazing by the action of the river.

(4) Cultivated land may be charged with a different revenue to that imposed on it at the Settlement Bách, if such settlement revenue has subsequently been reduced on account of deterioration of soil due to river action. In such case the revenue imposed shall be that given below for the crop grown.

3. The following rates only shall be applied in future assessments during the term of Settlement:—

	Per Acre.			Per Ghumáo.		
	Rs.	A.	P.	Rs.	A.	P.
I.—For uncultivated land fit for cattle grazing ...	0	1	0	0	0	9
II.—For land sown with poor rice (kharsu), swánk, máh, methi, kehn, charál, matar, linseed, masar, barley, masar and barley mixed	0	12	0	0	9	0
III.—For land sown with crops other than the above, not being sugarcane, if only one crop is grown in the year, or if two crops are sown when one or both of them belong to the class mentioned in clause II.	1	8	0	1	2	0
IV.—For land sown with surgarcane or with two crops in the year, except when one of the crops belong to the class mentioned in clause II.	2	4	0	1	11	0

4. No reduction of assessment shall be claimable on the ground that no crop is grown or that the crop is charged in the above scale with a rate lower than the existing assessment, unless the absence of cultivation or the growing of such crop has been necessitated by deterioration of soil due to the action of the river.

5. Whenever land paying revenue is injured by action of the river a remission shall be given in proportion to the injury. If in any such case the whole revenue is not remitted, the amount retained shall be fixed with reference to the rates stated in para. 3.

W. (2.)—*Conditions applying to Villages affected by Bein, Sohans, Chohs and other torrents, or by sand drift.*

We accept the following conditions laid down by the authorities in respect of alluvion or diluvion :—

1. *Alluvion*—Whenever land now unculturable is made culturable by the action of the rivers, or torrents, or sand drift, (naddi yá choh yá chhal yá urár ret) it will be assessed provided that no sum shall be so added of less than one rupee in amount.

2. *Diluvion*—Reductions for diluvion or other injury by rivers and floods (burdi yá nuksán ba zaryá naddi yá tughiáni páni) will not be given, unless at least one holding in the village has suffered injury to the extent of one-twentieth of its assessment.

3. *Urár ret*—When no injury of the extent described in Rule 2 has occurred, but the land of any holding has been injured by sand drift (*urár ret*) to the extent of one-fourth of its area, or to the extent of land paying one-fourth of its revenue, reduction shall be allowed. It is not intended by this rule that the said fourth shall have become unculturable, but only that it shall have been so injured as to need relief.

4. When any claim of the nature referred to in Rules 2 and 3 is being investigated all claims ascertained to exist in the same village for remission of revenue on the grounds referred to in Rules 2 and 3 shall be investigated at the same time without regard to the restriction stated in those Rules; provided that no remission of less than one rupee in amount shall be allowed.

5. In dealing with cases of enhancement or remission of revenue referred to in the above rules, the officers of Government shall adhere strictly to the village rates fixed at the settlement, that is to say:

(i) If the revenue has been distributed by shares or by an all round rate on cultivation, the all round rate on cultivation only shall be applied except that bad land may be assessed at half-rates.

(ii) If the revenue has been distributed by soil rates, such rates only shall be applied, but as in the previous case bad land may be assessed at half-rates.

(iii) Kharkána or *jhal* (tall coarse grass) land will be assessed at the rates of the circle.

(iv) Whatever land is assessed at half-rates will be raised to full rates when the authorities think right.

APPENDIX Z.—*Register showing fields assessed below full rates in Mauza* ____________.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
		ST. 19				ST. 19				ST. 19				ST. 19				ST. 19				ST. 19			
			Crops.				*Crops.*				*Crops.*				*Crops.*				*Crops.*				*Crops.*		
Khasra No.	NAME OF PROPRIETOR AND TENANT BRIEFLY.	Area cultivated.	Kharif.	Rabí.	Rate.	Area cultivated.	Kharif.	Rabí.	Rate.	Area cultivated.	Kharif.	Rabí.	Rate.	Area cultivated.	Kharif.	Rabí.	Rate.	Area cultivated.	Kharif.	Rabí.	Rate.	Area cultivated.	Kharif.	Rabí.	Rate.

Papers as to Fluctuating Assessments in the Fázilka Tahsil.

Extracts from No. 96 C., dated 7th April 1881, from Major E. G. Wace, Settlement Commissioner, Punjab, to the Settlement Secretary to Financial Commissioner, Punjab.

Para. 4. The district is a narrow strip of country 110 miles long, with an area of 3,004 square miles, extending from the Hissár district north-west to the Sutlej. It is divided into 3 tahsíls. But the circumstances of the entire tract are so similar that it is not convenient to submit three assessment reports in the usual way, that is to say, one for each tahsíl. The rainfall throughout the district averages only from 13 to 15 inches per annum; and, excepting a limited area flooded in the south of the district by the Ghaggar and in the north by the Sutlej, the cultivation is dependent entirely on these scanty rains. Of this rain cultivation two tracts, one known as Utar adjoining the Sutlej lands, and the other as Bagar, south of the Ghaggar lands, are more sandy than the rest, which is commonly known as the Rohi, and extends for 70 miles between the bed of the Ghaggar and the old bund of the Sutlej. It is not surprising to find that, under such circumstances, distinctions of soil, properly so called, have little influence on the agriculture of the district, profits, rents and assessment hitherto depending principally on distinctions of rainfall and irrigation. In my two tours through the district I have not come across a single village in which rents varied with natural distinctions of soil. I therefore directed the Settlement Officer to refrain from framing separate rates inside each circle on any other distinctions than those arising from well irrigation, river-floods, and rainfall. The circles and classes of cultivation arranged on the above principles are as follows :—

Rainfall, assessment circles, and soils. Settlement Officer's paragraph 3.

Settlement Officer's paragraph 10.

Settlement Officer's paragraph 6.

Settlement Officer's paragraph 8.

See also Settlement Officer's paragraph 41.

Circle.	No. of village.	Cultivated.*				Waste.	Total area.
		Irrigated.		Dependent on rain.	Total cultivated.		
		By wells.	By flood.				
		Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Bagar	57	...	...	142,699	142,699	31,652	174,351
Nali	114	473	31,355	146,740	178,568	162,072	340,640
Rohi	364	4	...	571,412	571,416	656,874	1,228,920
Utar	58	79	89	42,949	43,117	71,757	114,874
Hitár	65	6,133	14,100	2,488	22,721	40,855	63,576
Total	658	6,689	45,544	906,288	958,521	963,840	1,922,361

Para. 16. The action of the Sutlej on the Hitár chak is next described. In my recent visit to the district I spent several days in this circle, and I formed an unfavourable impression of the condition of some villages in the southern half of the circle. The floods on which it depends for its cultivation carry so much silt that the level of the channels by which they are distributed is constantly altering, especially near their heads. To remedy this very little engineering skill is required; but this little is indispensable. The levels at which each distributing channel can flow successfully ought to be permanently marked in its bed. If this were done, little further engineering assistance would ordinarily be necessary. At present the Tahsíldár and the village headmen all work in the dark, and much labor is expended in attempting to turn the water into channels of which the levels are unknown. The result of such blind work depends entirely on chance, and it is not surprising if many of the zamindárs feel this and consequently respond unwillingly to the call for their labour. In recent years the efforts of the zamindárs to turn the Sutlej floods into their old channels have met with only partial success. The villages in the south of the tract especially appeared to me very badly off. Last year's floods were bad, and this year's floods failed entirely. No doubt the floods of one year are more plentiful than those of another. But from the enquiries and observations made by me during my recent visit, I am inclined to think that the varying volume of each year's floods has much less to

The Sutlej floods. Settlement Officer's paragraphs 102 to 110.

* (The entries of cultivation are those of the average of the Patwári papers, 1874-1879.)

do with these failures than the silting up of the distributing channels, especially near their heads. The people have not at present any means of observing the extent to which each year's silt deposit alters the levels of these channels, and it is almost impossible to remedy such changes without the assistance of accurate levels.

Para. 39.—In the Hitar circle, of which the colonisation is not so recent as that of the preceding, but which suffered up to last settlement from some over assessment, the population has remained nearly stationary during the past 20 years; according to the revenue survey, cultivation has increased 10 per cent. But the average of the patwári's returns for the 5 years ending 1878-1879 throw doubt on this; and a much better view of what has really occurred is given at the end of Settlement Officer's paragraph 236, where he shows separately the data of the Bahak and Wattu villages. The Bahak villages, about one-third of the circle, form its northern portion, and in them both well and flood irrigation has increased about 140 per cent. In the Wattu villages, which form the rest of the circle, well irrigation has remained stationary, flood irrigation has decreased 27 per cent., and the only increase of cultivation is 1,000 acres bárani.* But the rise of the town of Fázilka and of its large trade southward, by river and railway, has greatly raised prices as compared with 20 years ago; and three-fourths of the produce of the tract being wheat, the improvement under this head exceeds 50 per cent.

Chak Hitar. Settlement Officer's paragraphs 230 to 236. Condition and prospects of the tract.

* Former 277 acres, now 1,353 acres.

The cultivators are a mixed class, principally Muhammadans, most of them not very skilful nor thrifty; 39 per cent. of the area is cultivated. The prospects of improvement depend entirely on the way the river floods are utilised. I believe the area of the flood cultivation might be much extended and if this were mangaged many more pakka wells would be built from the profits of this cultivation. But in recent years the flood channels have become choked at their heads, and the attempts of the people to remove or counteract these obstructions have failed. The consequent failure of flood irrigation has thus far affected principally the Wattu villages in the southern half circle and round Fázilka. But having regard to the known capricious action of the Sutlej it is not possible to forecast the prospects of this flood irrigation either in the Wattu villages, which are now badly off, or in the Bahak villages, which are at present well off; at least until the simple remedies suggested in my paragraph 16 above are applied.

See margin, para. 16 above.

Para. 40.—The Settlement Officer assumes the average produce of wheat at 9 maunds on lands irrigated by wells, and at 6 maunds on flooded lands. Cash rents are rare. The produce rents average one-fourth produce on lands irrigated by wells, and on other lands one-third of the produce. Straw is never divided on well lands; on other lands the owner sometimes takes a share. Mr. Wilson proposes the following revenue rates; and I add the rates assessed in the adjacent tracts:—

Proposed rates. Chak Hitar.

	Rate per Acre on				
	Lands irrigated by Wells.	Flooded Cultivation	Rain Cultivation.	Fallow.	Culturable Waste.
		Annas.	Annas.	Annas.	Annas.
Now proposed by Mr. Wilson.	14 Annas.	14	2	...	$\frac{1}{2}$
Rate of last Settlement in Pargana Wattu.	Re. 1	$12\frac{3}{4}$	2	...	2
Rate of last Settlement in Pargana Bahak.	Re. 1-7-0	15	8	...	$3\frac{1}{2}$
Rates recently assessed by Mr. Purser in Mamdot.	Rs. 12 per well, plus unirrigated rate.	13	...	4	...
Rates recently assessed by Mr. Purser in adjacent parts of the Montgomery district.	Rs. 10 per well, plus unirrigated rate.	12	...	4	...
Bahāwalpur rates.	Rs. 2.	24	8	...	...

The number of the irrigating wells are 286, and the Settlement Officer assumes a gross chahi area of 7,000 acres, or a fraction less 25 acres per well. Mr. Purser's Montgomery rate of Rs. 10

Pakka 217, kacha 69.

per well, plus 12 annas per acre cultivated, would equal on a 25-acre well a rate of 18½ annas per acre cultivated. Mr. Wilson's proposed rates on waste and baráni may, I think, be accepted. I should have been inclined to propose for baráni 3 annas, the same as in the Utar, the circumstances of the baráni land in both circles being identical. But the area concerned (3,000 acres) is unimportant. The rate on flooded land is stated at 14 annas, but Mr. Wilson wishes to assess Rs. 1,000 below the results of his rates, which is tantamount to assessing at 13 annas. For reasons which I will give at the end of any next paragraph, I recommend that a rate of 13 annas be assumed for these flooded lands if they are assessed at a fixed assessment on the ordinary system. But I shall recommend further on the application of a fluctuating assessment to all the flooded lands, and under such an assessment the rate will of course be higher.

Rate on well irrigated.

Para. 41.—As regards lands irrigated by wells, Mr. Wilson recommends that they be assessed no higher than land flooded by the river and not aided by wells. He does this on the ground that the wells cost Rs. 20) each; that the irrigation involves, while the crops are growing, the continuous labour of six pairs of oxen and their drivers; and that the difference in the produce of well and flood irrigation is not larger than covers the interest of the capital sunk in the well. In paragraph 230 he indicates, by a rough deduction from his produce estimate, that the owner realizes only three annas an acre more from well irrigation than from flood cultivation. I have given a great deal of thought to this proposal of Mr. Wilson's because it is quite true that the great majority of the rabi crops on these well lands is wheat, the same crop as is grown on the flood lands. It is also true that the kharíf crops are much less valuable than on lands irrigated by wells in districts with a better rainfall. But judging from Mr. Wilson's own reasons for his proposals, he seems to me to assume too readily that the revenue assessed on these well lands in past years has operated as a tax on capital, and he gives too little weight to the contrary inference which is to be inferred from the fact that, in spite of those rates, the number of pakka wells has increased during the past 20 years from 122 to 217. Another argument, which affects my own judgment in the matter very strongly, is derived from the uniform practice both of the native rulers who preceded us and our own Settlement Officers. I do not think that as yet a single tract can be referred to in which either the native rulers or our own officers have taken the same view as Mr. Wilson, and it will be remembered that during the past 10 years we have assessed some of the most rainless tracts in the Punjab. Mr. Wilson's produce estimate is admittedly of a very imperfect nature, and I do not think that a crude deduction from that estimate, such as is stated in the commencement of his paragraph 235, ought to outweigh the inference arising from a wide experience of this nature.

If, however, it were necessary to decide the question by our produce estimates, it would be pertinent to point out that in paragraphs 175 and 184 the kharíf crops yielded by lands irrigated from wells have been much under-estimated. For evidence of this I refer to paragraph 7 of Mr. Wilson's report on the kharíf of 1880, which is appended to his report and was written by him after he had submitted his assessments to me. In paragraph 175 of his assessment report he estimated the average kharíf crop on wells at 500 acres of jowár. In paragraph 7 of his report on last kharíf (a season in which no rain fell after July), 1,954 acres of crops (maize, jowár, cotton, &c.,) were matured on these wells or exactly 4 four times the area reckoned in the Settlement Officer's produce estimate. The produce estimate is open to other objections as, for instance, the low value of Rs. 5* per acre which he has taken for the gross produce of the crops classed as "other rabi." These include tobacco, chillies, vegetables, &c. But I think I have shown sufficiently that the statistics of produce at our command do not support Mr. Wilson's conclusions that there is little difference between the rent receipts of land irrigated by wells and flood cultivation.

*Rs. 2,000, acres 400.

Settlement Officer's paragraph 88.

The cost and keep of oxen are paid from the share of the produce taken by the tenant, and that the rates of revenue hitherto levied have operated as a tax on capital is disproved by the great increase in the number of pakka wells. And, even if the arguments for the exemption of these wells from the system of assessment hitherto always applied both here and in adjacent districts

were stronger than I have shown them to be, the introduction of such an assumption in marked contrast to the system followed in the adjacent districts and in the south of the Punjab would be likely to prove inconvenient when these tracts are again settled. Mr. Wilson correctly states, in his paragraph 101, that the best crops are raised on land first rendered fit for sowing by floods and subsequently moistened periodically by well irrigation.

Having regard to this and to the fact that about 8 acres of kharíf can be raised on each well, and considering the rates assessed in adjacent tracts, I think a lump sum of at least Rs. 6 ought to be assessed on each well to be paid in addition to the flood (*rez*) rate on the cultivation attached to the well. The effect of this will be to enhance the estimated assessment stated at the close of paragraph 235, by Rs. 1,716, that is to say, it will raise Mr. Wilson's gross revenue rate estimate for the circle from Rs. 21,000 to 22,716. He proposed to realize in his village assessments only Rs. 20,000. If, however, as I recommended in the previous paragraph, the rate on flood cultivation is taken at 13 annas, the total revenue rate estimate, as corrected by me, will amount to Rs. 21,672, and the Settlement Officer should, I think, be required to assess up to this sum, for he manifestly under-estimated Government's one-half assets by the sum which I have added on the wells. I do not propose a separate rate for kacha and pakka wells, as I find from inquiry that there is little difference in their irrigating power, and that both descriptions of wells are used equally for the kharíf crops. The Settlement Officer, in making his detailed village assessment, will fix a rate for the wells, kacha and pakka, of each village charging slightly higher rates in the best cultivated villages, where profits are realized from the cultivation of tobacco and vegetables and other good crops, and assessing less than the average on the poorer wells in the south of the tract which are distant from the river, and where the floods often fail, or on wells which have little kharíf cultivation.

No. of Wells.	
Pakka ...	... 217
Kacha	... 69
Total	... 286

The desirability of applying a fluctuating system to the Sirsa district.

Para. 44.—In paragraphs 241 to 247, Mr. Wilson discuses the extent to which a fluctuating system of assessment can conveniently be applied to the Sirsa district. I append copies of the correspondence that has previously passed on the subject. In dealing with these proposals I wish in the first place to disclaim the position attributed to me in the Settlement Officer's paragraph 243 as the advocate of a particular method of fluctuating assessment. As I understand the policy of Government, it is opposed to the introduction of any changes the necessity of which is not established by a careful review of the past fiscal history of the district; and neither my duty nor my convictions lead me to support any particular system. In the next place, towards the end of paragraph 244, the Settlement Officers write that it is within his experience that the officers of Government so press the people for the payment of fixed land revenue as to drive them to sell their plough cattle, mortgage their land, and flee the country, and he quotes this experience as sufficient to necessitate the grant to the Deputy Commissioner of larger powers to suspend fixed revenue than is allowed by existing rules. What I understand Mr. Wilson to mean by speaking of such abuses as within his experience is that he knows of one recent case in which such abuses occurred. But the indefinite language used by him is capable of much wider interpretation, and the suggestion that such abuses are usual or otherwise than wholly exceptional incidents of the existing system should not, I think, have been made. Similarly the assertion in the same paragraph that, as a matter of experience, the existing rules prevent the granting of timely suspensions in case of distress will not be allowed to be correct by those who have any wide acquaintance with the subject. Passing over these points, the question for decision is whether on the full information regarding the fiscal history of the Sirsa district, supplied by this report, any alterations in the land revenue system hitherto in force are called for. Upon the general success of that system I have already expressed my opinion in paragraph 10 of this letter, and that success seems to me to have been so great as to necessitate our considering very carefully proposals for its change which have not originated either with the agriculturists themselves or with the officers who have administered the district.

See end of Settlement Officer's paragraph 242.

Para. 49.—As regards the rest of the district, *viz.*, the Nali and Hitar circles, I agree with the Settlement Officer in thinking that the Hitar Chak should be put under a fluctuating assessment of the same nature as that recently applied on the Indus river, in the Dera Ismáil Khán district, and on similar lands in the Mooltan and Muzaffargarh districts.

Fluctuating assessment in the Sutlej Hitar.

The Sutlej floods in the Hitar circle are so uncertain that it is impracticable to make a fair fixed assessment. Eight villages are already under fluctuating assessment, and the whole number of villages in this circle, of which the assessment is at present being revised, is only 47, with a cultivated area of 16,000 acres. The extension of the system to the rest* of the circle (pargana Bahak) must await the expiry of the settlement still current in them. As regards the reported wish of the agriculturists to have such a system extended to them, I ought to mention that when I was at Fázilka last January a number of the village headmen expressed a contrary wish to me. The fact is that their minds are very much unsettled on the subject, and if they knew (as very likely they do) that the revenue rates of a fluctuating assessment would be considerably higher than those of a fixed assessment, they would most likely express a preference for the latter. But that the Government can safely continue a fixed assessment in this circle I do not believe. It lasted well enough (or badly enough) as long as the floods were fairly favourable, but in bad years, such as are now usual, the villages, especially those in the south of the tract, have the greatest difficulty in paying a fixed assessment, and it injures their resources seriously.

Settlement Officer's para. 236.

* 18 villages, acres cultivated 8,757.

For the reasons explained in paragraph 41 of this letter, I do not support Mr. Wilson's proposals to assess well irrigation at the same rates as flooded lands (*rez*).

Adding on this account a well abiána of Rs. 6 per well, payable in the kharíf, I recommend the adoption in this circle of the fluctuating rates proposed in the Settlement Officer's paragraph 246 which are about one-and-a-half times the fixed rates proposed by him. It is not practicable to mark off the baráni cultivation into chaks and apply a fixed assessment to that cultivation, as the limits of the floods vary much. But the area of the baráni cultivation is very small (some 2,000 acres), and will not add appreciably to the fluctuating work. As in the Mooltan division, the well abiána will be classed as fluctuating revenue remissible when the well is destroyed by diluvion, and falls permanently out of work from other causes.

Extracts from No. 100 C.S., dated 9th September 1881, from F. C. CHANNING, Esq., Settlement Secretary to Financial Commissioner, Punjab, to Settlement Commissioner, Punjab.

The Hitar circle.

16. Chak Hitar, which is the tract contained in the present Sutlej valley, comprises 65 villages, of which 18 are in the pargana Bahak, where the former settlement has not yet expired. According to the returns of the present settlement measurements the cultivated area is :—

	Acres.
Chahi	9,389
Flooded	13,868
Baráni	1,890
Total ...	25,147

The population consists chiefly of improvident Muhammadans; the census returns have been :—

1862	14,372
1868	17,347
1881	18,218

The chief staple of the circle is wheat.

Sixty-two per cent. of the cultivation is in the hands of tenants, and out of this 83 per cent. is held by tenants not having rights of occupancy. Rents are usually paid in kind, and the Settlement Officer could not find materials for a net produce estimate based on cash rents. His estimate of the net produce, which he worked out from the produce estimate, yielded a half net asset jama of Rs. 22,000, and the assessment which he actually proposed was Rs. 20,000, an increase of 14 per cent. on the present jama of Rs. 17,510.

The rates at which he proposed to distribute this assessment were—

	Rs.	A.	P.	
Chahi and flooded	0	14	0	per acre.
Baráni	0	2	0	„
Culturable waste after deducting one-third	0	0	6	„

These rates he applied to the estimated areas as follows :—

	Area in acres.	Jama.
		Rs.
Chahi and flooded	23,000	20,125
Baráni	3,000	375
Waste	16,000	500
Total		21,000

But he proposed to assess at only Rs. 20,000.

His last proposals, after receiving your review and the returns of the Settlement measurements, are to assess as follows :—

	Acres.	Rate.			Jama.
		Rs.	A.	P.	Rs.
Chahi and flooded	23,257	0	13	0	18,896
Baráni and flooded	6,098	0	2	0	762
Waste	16,000	0	0	6	500
	...	...			20,158

Or in round numbers Rs. 20,000, of which he proposes to assess Rs. 13,000 on the villages now under revision of assessment and Rs. 7,000 on pargana Bahak. This assessment will give a merely nominal increase in the villages now under revision, in which the present jama is Rs. 12,907. Their state, as shown by the former and present settlement measurements, is as follows :—

	Chahi.	Flooded.	Baráni.	Total cultivation.
Former settlement ...	4,108	13,826	277	18,221
Present „ ...	6,419	9,727	1,008	17,156

In pargana Bahak the proposed assessment of Rs. 7,000 gives an increase of 50 per cent. on the present jama of Rs. 4,603.

The above rates are those which are proposed for sanction, if the assessment is to be a fixed one, and on that assumption you accept the rates, but propose in addition a well rate of Rs. 6 per well. Mr. Wilson does not assent to this proposal, but Mr. Lyall concurs in your view. If it is decided that the assessment is to be a fixed one, the Rs. 6 per well, which will raise the proposed assessment by Rs. 1,716, should be added to the jama as worked out from the acreage rates, and the zamindárs should be left to decide how the total sum is to be distributed.

Proposal to introduce fluctuating assessments in the Hitar.

20. In the Hitar circle you concur with the Settlement Officer in recommending the introduction of a fluctuating system of assessment. The rates proposed by the Settlement Officer for his assessment are—

	Rs.	A.	P.	
On flooded lands	1	6	0	per acre.
On baráni lands	0	5	0	„
On culturable waste	0	1	0	„

To these rates you propose to add an abiána rate of Rs. 6 per well, to be classed as fluctuating revenue and to be remitted when the well is destroyed by diluvion or falls permanently out of use owing to other causes. The Financial Commissioner concurs in your view as to the necessity for a fluctuating assessment in this circle, but as to the rates to be imposed his later experience, especially of the Ravi villages in Montgomery which are very like those under reference, makes him disposed to think—

(1) that a light chahi and jhalari rate, pitched a little higher than the sailáb rate, is to be preferred to a separate abiána which is often heavy on struggling wells which depend for their continued existence in years of deficient floods upon the cultivation of a few acres only;

(2) that a special light rate is advisable for certain risky poor kharíf crops which often fail.

A copy of a note recorded by Mr. Lyall last March, after visiting the Ravi villages in Montgomery, accompanies this letter, and Mr. Lyall desires you, after perusal of it, to reconsider your proposal and again report.

Mr. Wilson recommends that the waste shall be assessed only in favourable years, but the Financial Commissioner does not think that the rate to be imposed on culturable waste should vary with the seasons. I am to add also that the Financial Commissioner considers the baráni rate of 5 annas per acre too low for a fluctuating rate, and thinks it might be put at eight or six annas at the lowest.

Letter No. 101 C.S., dated Simla, 9th September 1881, from F. C. Channing, Esq., Settlement Secretary to Financial Commissioner, Punjab, to the Secretary to Government, Punjab.

I am directed to submit, in original, Settlement Commissioner's letters Nos. 96 C. of 7th April, 194 of 9th July, and 200 of 15th July, with enclosure, being the papers connected with the revenue rate report of the Sirsá district, together with a copy of this office reply No. 100 C. S., of to-day's date. This has been issued without being first submitted for approval, in order that Major Wace may propose rates for the fluctuating assessments of the Ghaggar and Hitar tracts. These rates will be separately reported hereafter for the information and general approval of His Honor the Lieutenant-Governor. Meanwhile the Government sanction to the introduction of the system of fluctuating assessment need not be deferred.

2. The points which require the orders of Government are—

(1.) The measures to be taken with reference to the irrigation from the Ghaggar (para. 7 of the Financial Commissioner's orders.)

(2.) The measures to be taken with reference to the irrigation from the Sutlej (para. 8).

(3.) The cesses (para 17).

(4.) The proposal to reserve the power of introducing the cycle system of collections in the Bagar, Rohi and Utar villages (para. 19).

(5.) The proposals to introduce fluctuating assessment in the Hitar and Ghaggar lands (paras. 20 and 21).

Letter No. 166 C., dated Camp, 23rd December 1881, from Major E. G. Wace, Settlement Commissioner, Punjab, to F. C. Channing, Esq., Settlement Secretary, Financial Commissioner, Punjab.

Forwards Settlement Officer, Sirsa's report on the rates and arrangements for introducing a fluctuating assessment in the Sutlej Hitar of tahsíl Fázilka, district Sirsa.

In para. 20 of your No. 100 S.C., dated 9th September last, Mr. Lyall approved of the proposal to assess the Sutlej Hitar tract of tahsíl Fázilka in the Sirsa district on a fluctuating system, but directed that the rates and conditions of the proposed system should be reconsidered with reference to his remarks conveyed in your letter in reply. I have now the honor to forward, in original, a letter No. 295, dated 22nd ultimo, from Mr. Wilson, Settlement Officer of Sirsa, furnishing a further report on the subject.

Summary of previous correspondence, and the petition of the land-owners on the subject. Settlement Officer's paras. 1 to 6.

2. In paras. 1 to 5 Mr. Wilson recapitulates the previous correspondence and the instructions received by him. In para. 6 he gives a translation of a petition addressed to him on the subject by the land-owners of the tract. I spent a few days at Fázilka with Mr. Wilson in the beginning of November and the land-owners in their conversations with me expressed the same request as they subsequently embodied in their written petition to Mr. Wilson. I am anxious that the system now to be sanctioned should adequately meet these wishes. They are, I think, on the whole justly conceived, and such as in the special circumstances of this tract Government can rightly respond to.

3. In the present stage of this correspondence it is not necessary for me to follow Mr. Wilson, though the data stated in paras. 9 to 19 of his letter,

by means of which he explains with clearness the fluctuating rates now proposed by him ; these compared with those before recommended are per acre :—

Originally recommended.			Fluctuating rates now proposed.	
Class of cultivation or land.	Rates for a fixed assessment.	Rates for a fluctuating assessment.	Class of cultivation or land.	Rate.
	Rs. A. P.	Rs. A. P.		Rs. A.
Irrigated by wells or jhalars.	(Flooded rates plus	Rs. 6 per well.)	Irrigated by wells or jhalars.—	
			(I) Single crops ...	1 9⅗
			(II) Double crops ...	2 6⅖
Flooded cultivation ...	0 13 0	1 6 0	Flooded cultivation.—	
			(I) Chural, masar, methra	0 12⅘
			(II) Other crops ...	1 9⅗
Rain cultivation ...	0 2 0	0 5 0	Rain cultivation ...	0 6⅖
Culturable waste ...	0 0 6	0 1 0	Fixed rate on total assessable area	Nine pies.

And the Settlement Officer shows, in para. 19, that a fluctuating assessment at the rates now proposed would have yielded, in the three harvests observed since settlement operations were commenced, the full sum which could be secured by the fixed assessment rates originally contemplated.

Ravi rate per acre.	
	Rs. A. P.
Irrigated cultivation.—	
(i.) Double crop ...	2 4 0
(ii.) Single crop ...	1 10 0
Flood cultivation.—	
(i.) Til, moth, mung mash, raman and nanabad	0 12 0
(ii.) Other crops ...	1 8 0
Rate on total assessable area	1 to 1½ annas.

See end of para. 12 of Mr. Wilson's letter.

The rates recently sanctioned by Mr. Lyall for the Ravi Hitar are given in the margin. I should be glad if Mr. Lyall will sanction a slight alteration and modification of the rates proposed by Mr. Wilson, 1st because they seem to me very full rates ; and 2nd, because, though fixed in even annas per bigah, they will neither divide evenly by the biswa into which the bigah is sub-divided, nor can they be stated in even annas per acre ; and therefore, if sanctioned as they stand, they will cause some inconvenience both in the village accounts and in the Government's accounts. The rates I recommend are as follows per acre ; and I add the equivalent per bigah and biswa to show that the fault above pointed out is remedied by them :—

Class of land.		Rate.		
		Per acre.	Per bigah.	Per biswa.
		Rs. A. P.	Rs. A. P.	A. P.
20 Biswas = 1 bigah	On total assessable areas now stated, 52,546 acres,	0 0 8	0 0 5	0 0½
8 Bigahs = 5 acres	Rain cultivation	0 8 0	0 5 0	0 3
Flood cultivation.—				
(I) chural, masar and methra		0 12 0	0 7 6	0 4½
(II) Other crops		1 8 0	0 15 0	0 9
Irrigated lands.—				
(I) Single crop		1 8 0	0 15 0	0 9
(II) Double crop, including sugarcane and cotton		2 8 0	1 9 0	1 3

Rate on total assessable area.
(Settlement Officer's para. 9.)

4. I am very strongly of opinion that the rate on the total assessable area must be much lower in this tract than has been recently fixed on the Ravi. The reasons for this are stated in Mr. Wilson's para. 9. The rate proposed by me will yield about Rs. 2,200 which is one-tenth of the average expected assessment. The actual grazing profits of the tract are believed to be less than a quarter of this sum. In the greater portion of the tract the grazing is poor, especially in bad years, and the Settlement Officer should be allowed (as proposed in his para. 7) to vary the rate in different villages, subject to the condition that the total fixed assessment shall average the full rate of 8 pies.

Rate on rain crops—(Settlement Officer's para. 17.)

5. I have raised Mr. Wilson's rate on rain cultivation from 4 to 5 annas per bigah. The point is not of much importance, and I do not think that 5 annas is too high or that the difference will be felt.

Rates on flood cultivation—(Settlement Officer's paras. 14—16.)

6. In dealing with the flood cultivation Mr. Wilson gives up the system of charging a low rate on newly formed land, and substitutes for it a half rate on the crops usually cultivated on such land. The cultivation of new land involves little expense, usually none, and I think he correctly argues that if it is good enough to yield wheat the wheat rate should be charged. He also shows that all the crops can be charged at the same rate, excepting only chural, mattar and methra, which are grown only for fodder and usually in inferior and newly formed lands. These crops of chural, masar and methra, which he proposes to charge at half rates, are not the same as those chosen on the Ravi for similar favorable treatment, but I think that the difference of treatment is well founded; and it will be noticed that these are the crops for which the zemindárs themselves desire favourable terms. I do not think the ordinary rate on flood cultivation should be higher than the Ravi rate of Re. 1-8-0. The rate before proposed was 13 annas fixed, or Re. 1-6-0 fluctuating, and if we push up the rate to so high as Re. 1-10-0 we shall afford some ground for a tendency to assess a considerable number of crops as below the average.

Settlement Officer's para. 6.

I also concur in the necessity of assessing flood crops which are distinctly below the average at half rates; but I do not think a provision of this nature is necessary in respect either of baráni or of irrigated cultivation.

Settlement Officer's para. 20.

Rates on crops irrigated by wells (Settlement Officer's paras. 10, 11, 14 and 18.)

7. The rates proposed for crops raised on land irrigated by wells and jhalars are the same as for those raised by flood cultivation, double crop land excepted. The reasons given for this course appear to me sufficient and convenient. And, adopting the Ravi system, the Settlement Officer adds a special rate of Rs. 2-6$\frac{2}{3}$ for land bearing two harvests in the year. This I have raised to Rs. 2-8-0; and it should be understood as applying to all land cultivated with sugar-cane and cotton. The former occupies the land for two harvests, and the latter cannot usually either be preceded or followed by a rabi harvest; but it is a valuable crop when irrigated, and can afford to pay the higher rate of Rs. 2$\frac{1}{4}$. Mr. Wilson's present proposal to assess cháhi and sailáb crops at similar fluctuating rates is not the same as his previous one, for a double crop rate has now been added; and the kharíf crops will also be charged. In his previous proposals, both these provisions were wanting. Qualified to this extent, I think his proposals are just; but, as stated at the end of the last paragraph, I do not think it necessary to allow any of these irrigated crops to be charged at half rates. The cultivation round the wells is the best in the tract; and if the crop on some of the outer fields of a well is poor, this will usually be compensated by the better yield of the crop on the inner fields.

Settlement Officer's para. 18.

Rules for assessment of above rates. Settlement Officer's paras. 6 and 20—23.

8. I recommend for sanction the rules for applying the above rates, stated in the Settlement Officer's paragraph 20, with a few modifications which will be conveniently shown if I here transcribe these rules, with my proposed modifications shown in *red ink*. The only important modification is that noticed at the end of my previous paragraph. Possibly rule 2 (*b*) will be thought unusual, but the land-owners lay stress on it, and both Mr. Wilson and myself consider such a provision necessary in this tract. Each harvest will be observed separately, shortly before it ripens.

See Settlement Officer's para. 21.

The proposed rules are as follows:—

(i) The patwári shall, in making his girdawári, measure up and enter as "cultivated" all the land actually *bearing a crop during* the harvest and no more, and shall fill up the column "kind of soil" with the word "cháhi," "rez" or "baráni," according to the circumstances of the field in that harvest without regard to the entry regarding the field in the settlement record (*e.g.*, if a field entered in the settlement record as cháhi is cultivated with the aid of rain alone, he shall enter it as baráni). Where the crop appears

much below average, he shall make a red mark opposite the field in his girdáwári paper, with a short note as to the cause, such as "dried up," "failure of flood."

(ii). The Náib-Tahsíldár or Tahsíldár shall see all these fields, and shall make an order regarding the rate to be assessed on them on the following principles :—

(*a*) If the crop at all approaches the average in quality, the full rate to be assessed;

(*b*) If there is practically no *grain* produce, no rate to be assessed on the field at all;

(*c*) *On sailáb cultivation,* if there is some produce, but much below an average crop, half rates to be charged. *But on baráni crops, and on crops irrigated from wells,* either the *full rate or none shall be charged.* In deciding what *sailáb* crops should be assessed at half rates, he should bear in mind the state of the prices current.

(iii). The inspecting Assistant Commissioner or Extra Assistant Commissioner shall see as many as possible of the fields assessed below full rates, and decide whether there is reason for the reduction made.

Instalments—(Settlement Officer's para. 23.)

9. As regards the instalments in which the revenue is to be paid, I agree with the Settlement Officer that the revenue assessed on the rabi should form the rabi instalment; and that the rest, *viz.*, that assessed on the kharíf crops, plus the fixed demand, should be paid as the kharíf instalment.

Protective leases. (Settlement Officer's para. 24, Financial Book Circular No. XIV., dated 12th September 1881.)

10. There remains the question of the manner in which protective leases should be treated. The Settlement Officer recommends that crops irrigated from wells, holding protective pattahs, be charged half rates. I think this is the most convenient rule that can be adopted, and that it will be considered by the land-owners as a fair adjustment of the question. I, therefore, hope that the Financial Commissioner will recommend it for the sanction of Government. None of the three rules stated in para. 2 of your Circular on the subject could conveniently be applied.

Date of introduction of new assessment. (Settlement Officer's para. 25.)

Para. 22 of your letter under reply; also your No. 137C.S., dated 10th October last.

11. The Settlement Officer's concluding paragraph asks that the arrangements herewith proposed be introduced with effect from the rabi now growing. There is urgent necessity for this, which the Financial Commissioner in his orders on the assessment report has already recognised.

Letter No. 51-471, dated 25th January 1882, from the Senior Secretary to Financial Commissioner, Punjab, to the Secretary to Government, Punjab.

In continuation of my No. 101 C.S., of 9 September, I am directed to forward, in original, Settlement Commissioner's No. 166 C., of 23rd December, and a copy of this office reply, No. 470 of this date, on the subject of the assessment of the Hitar circle of Sirsa.

2. The Financial Commissioner hopes that his instructions to the Settlement Commissioner will be approved by His Honor the Lieutenant-Governor.

Letter No. 470 S., dated 25th January 1882, from the Senior Secretary to Financial Commissioner, Punjab, Lahore, to Settlement Commissioner, Punjab.

I am directed to reply to your letter No. 166 C., of 23rd December, on the subject of the proposed assessments in the Hitar circle of Sirsa.

2. The rates proposed by you are accepted by the Financial Commissioner subject to the following remarks and alterations.

The Financial Commissioner would be more inclined to raise the Settlement Officer's rate of nine pies per acre on assessable area than to reduce it as you propose to eight pies and as the Settlement Officer (in Mr. Lyall's opinion rightly) proposes to vary the rate from six pies to one anna in different villages. The advantage of taking a rate, which applies without fractions to the bigha and acre is not apparent in respect to this rate; and moreover it will apply to

large areas only. The Settlement Officer will assess at 4, 5, 6, 7 or 8 pies per bigha, and his total assessment of the rate should not be below his average of nine pies per acre. As the river action will cause variations of area, the Financial Commissioner thinks that, for the sake of simplicity of account, the assessment yielded by these rates should, as well as the assessment on cultivation, be treated in account as fluctuating revenue and kept off the Rent-roll, as has been done in other districts. It might be called the rate on wood and grass.

3. The Financial Commissioner accepts your proposed rates on cultivation, but holds that the half rate for very poor sailáb (*rez*) crops should not be allowed for chural, masar and methra. The rule should be Re. 1-8 per acre for all *rez* crops, except the above three crops for which half rate or 12 annas. The full rate for other *rez* crops to be reduced to half rate, if the crop, though not a total failure, is very inferior. Chural, &c., are Mr. Lyall remarks, grown to feed buffalo cows, and if sold as they often are, sell at good prices per biswa.

4. As to the proposed rules Mr. Lyall prefers the Settlement Officer's wording of rule I. He prefers "sown" to "bearing a crop" as a direction to the patwárís. So again in rule II (*b*) he would have the wording "produce" instead of "grain produce." Some crops are not grain crops, and the Financial Commissioner does not think that all grains crops, and especially jowár, should always escape, if they give no grain, although they give some good fodder. In rule II (*c*), too, Mr. Lyall has made some changes.

5. A list of the rates sanctioned by the Financial Commissioner and a copy of the rules as amended by him accompany this letter.

6. Your proposals as to instalments seem appropriate and are sanctioned by the Financial Commissioner. The revenue assessed on the rabi crops will be paid in the rabi, and that on the kharíf crops and the grass and wood assessment in the kharíf. The Financial Commissioner also sanctions your proposal that in the case of wells under protective pattáhs half rates should be levied during the period of exemption.

7. The assessment can be introduced from this rabi in anticipation of the sanction of the Government.

8. I am to add that Mr. Lyall understands that the word "rez" as distinguished from "baráni" includes land moistened by percolation, though not perhaps actually flooded. It is therefore a better word to use than flooded.

Letter No. 306-2189, dated 29th March 1882, from the Senior Secretary to Financial Commissioner, Punjab, to the Secretary to Government, Punjab.

My letters Nos. 51 and 52 of 25th January submitted, for the orders of His Honor the Lieutenant-Governor, proposals for the introduction of fluctuating assessments into the Hitar and Nali circles of the Sirsa district. At the time that the Financial Commissioner framed these proposals he had not visited the tracts to which they refer; and although he was then intending to shortly visit the Sirsa district yet, as it seemed important that orders should be passed without delay, he judged it better not to defer the submission of his proposals. He has since marched through the Sirsa district and discussed the questions involved in his proposals with the people. He found the leading men generally opposed to the introduction of fluctuating assessments in a manner for which he was prepared in the Nali circle, but he was not prepared for the opposition to the scheme displayed in the Hitar circle; this opposition has recently arisen and appears to be largely due to bad advice given to the people by a dismissed Kanúngo and by some other district officials.

2. Mr. Lyall, after full enquiry and after discussing the subject with the zamindárs and with the Settlement Officer, has come to the conclusion that in the Hitar circle it is necessary to hold to the plan of authoritatively imposing fluctuating assessments, subject to the option which he thinks should be given to the people at the time of announcing the jamas of having fixed assessments for :—

(1) Utar chaks in a village, if any, but out of the reach of flood waters;

(2) Land irrigated by pakka wells.

Where a village elects for a fixed assessment of land, irrigated by pakka wells, the well areas round each well for which a fixed assessment is desired should be marked off on the field map, and the Settlement Officer should then fix the assessment for such lands, taking into fair consideration the chances of *rez* or flood as well as of well cultivation within each well area. As the total chahi area of the circle, including land watered by jhalars and kacha wells, is only 10,005 acres, and as many if not most villages will prefer to have a fluctuating assessment of their pakka wells when they know that the rest of their assessment is to be fluctuating, the Settlement Officer will be easily able to assess in detail the pakka wells in the villages which wish these to be given a fixed assessment. Such a detailed assessment was made in Multan and in part of Muzaffargarh on a much more extensive scale.

3. The only other changes which Mr. Lyall would make in the former proposal for the Hitar circle are as follows :—

Firstly, for wells under protective leases he thinks that, as has been now recommended by the Settlement Officer, it should be a condition that, during the term of the lease, only half the fluctuating rates should be levied on a cultivated area up to 10 acres per well in each harvest: in villages in which wells have a fixed assessment, wells made or restored after settlement and protected by leases should get, at the option of the owners, fixed assessments at half the average village rates.

Secondly.—The Financial Commissioner thinks that the *do-fasli* rate should be reduced from Rs. 2-8 to Rs. 2-4 per acre, and that neither cotton nor sugar nor any other single crop should be charged with the *do-fasli* rate.

Thirdly.—He thinks that the *rez* or flooded rate should be reduced from Re. 1-8 to Re. 1-4 per acre, and that on the other hand the power of assessing *rez* crops at half rates should be withdrawn as it has already been withdrawn for all other classes of cultivation in the proposals for this circle previously submitted.

If this power is withdrawn, Mr. Lyall thinks that Re. 1-4 per acre is a rate quite high enough for these lands. It is a higher rate than that imposed on *rez* land of equal or superior quality in Multan and in Jhang. It is indeed lower than the rate fixed by Mr. Lyall for the Ravi villages of Montgomery, but in the first case the flooded land is in those villages decidedly better than here, and in the second place the rate was purposely highly pitched in the Ravi villages because their owners were being granted permission to throw up their settlement engagements at a great loss to the Government.

Although the power of assessing at half rates on poor crops would be done away with, yet the condition of entire remission for entire failure of crop would remain and where the assessing officer found that the crop in a field had come up in patches or that a large proportion of the separate plants had dried up or otherwise failed to come to anything, he should be allowed to treat a proportion of the area of the whole field as having completely failed, and to remit the assessment thereon, as is done by Canal Officers under similar circumstances.

4. In the Nali circle the Settlement Officer and Settlement Commissioner originally proposed that the fluctuating system should be imposed only on the flooded lands of the Ghaggar and not on the Star baráni lands : and, after full inquiry and discussion during his recent visit to the tract, Mr. Lyall is now of opinion that it is not necessary to impose authoritatively a fluctuating assessment on these Star baráni lands and that the people should be allowed to elect between a fixed and a fluctuating assessment on them ; and if all or a large majority of the owners of a village declare for a fixed assessment on these lands, it should be granted them. But Mr. Lyall still considers a fluctuating assessment is necessary in the case of the Ghaggar flooded lands and should be imposed authoritatively on all villages ; in many of them such a system has for some years been in force.

5. In conclusion I am to ask for the favor of very early orders on the proposals to introduce these systems ; no orders sanctioning the rates to be used

are at present needed; these the Financial Commissioner can at present authorise on his own responsibility and final recommendations will be made when the Settlement Report is submitted. Further experience as to the working of the rates will then have been gained, and the Financial Commissioner will be in a better position to ask for the final orders of Government as to the rates to be adopted.

Mr. Lyall thinks it right to add, for the information of Government, that the Settlement Officer, Mr. Wilson, in consideration of the opposition evinced by most of the villages is now in favor of allowing each village in both circles to elect for fixed or fluctuating assessment. Major Wace, the Settlement Commissioner, is, however, still strongly in favor of authoritatively imposing fluctuating assessments, and with the modifications of former proposals described in the former part of this letter, Mr. Lyall agrees with him. It must be remembered that in chak Nali fluctuating assessments of Ghaggar flooded lands have been in force under the former settlement in a number of villages. So also in chak Hitar a rough system of fluctuating assessment of *rez* or sailába land has been in force in a majority of villages.

Extracts from Letter No. 155, dated Lahore 19th June 1882, from the Junior Secretary to Government, Punjab, to the Secretary to the Financial Commissioner, Punjab.

Fincl. Commr's.	No.	101	of dated	9th Sept.	1881
,,	,,	116	of	,, 15th ,,	,,
,,	,,	51	of	,, 25th Jany.	1882
,,	,,	52	of	,, 25th ,,	,,
,,	,,	306	of	,, 29th March	1882
,,	,,	33	of	,, 30th May	1882

Para. 1.—I am directed to acknowledge the receipts of your letters marignally noted, submitting for the orders of Government various questions connected with the proposed assessment of the Sirsa district.

Para. 10. The fluctuating assessments which it is proposed to introduce in the Nali and Hitar tracts are dealt with in your letters Nos. 51 and 52 of 25th January, and in your subsequent letter No. 306 of 29th March. These will now be considered separately.

Para. 13. The reasons which have led to the proposal for a fluctuating assessment in the Hitar circle are those which brought about its adoption on the Indus and on parts of the Chenab and Sutlej. Some of the Hitar villages of Sirsa are already under such a system, and as others have become impoverished under the operation of a fixed assessment, it is considered desirable to establish a variable demand by authority throughout the tract. The rates finally recommended by the Financial Commissioner are as follows:—

	Per acre. Rs.	A.	P.
On total assessable area	0	0	9
On baráni lands	0	8	0
On flooded lands—			
(1) Chural, masar, methra	0	12	0
(2) Other crops	1	4	0
On wells and jhalar lands—			
(1) Single crops	1	8	0
(2) Double crops	2	4	0

These rates are based to some extent on those recently sanctioned in the case of the broken-down Ravi villages, and appear to the Lieutenant-Governor to be well devised; but, as in the case of the Nali circle, sanction will be postponed till the final report of the settlement is received. For the better *rez* crops and the double well crops, the rates originally proposed were Re. 1-8-0 and Rs. 2-8-0 per acre; but in your letter No. 306, Mr. Lyall has recommended their reduction to the amounts above noted. As a compensation in the former case, the permission to assess poor *rez* crops at half-rates is withdrawn, and this amendment is sanctioned by the Lieutenant-Governor. In other respects the rules for assessment applicable to the Nali circle will hold good in this tract also, allowance being made at the time of the yearly survey, according to the present practice of the Irrigation Department, in the case of crops which have failed here and there. The fluctuating assessment will be introduced authoritatively in all the Hitar villages, but Mr. Lyall has suggested that (1) Utar chaks in such villages outside the reach of the Sutlej floods, and (2) lands attached to masonry wells should be placed under

a fixed assessment if the people desire it. To the first proposal the Lieutenant-Governor has no objection, and it may be carried out. As regards the second, Sir Robert Egerton held that no lands subject to flooding should be assessed at fixed rates in a village which has a fluctuating assessment, and the Lieutenant-Governor agrees in this view. The recommendation that wells with protective leases should be assessed, so long as the leases last, at half rates under the fluctuating system, is approved.

Extract from the Final Report on the Revision of Settlement of the Sirsa District in the Punjab, by J. Wilson, Esquire, Settlement Officer.

The Hitar. Fluctuating assessment introduced.

321. The circumstances of the Sutlej Hitar are exactly similar to those of the strips of land similarly situated along the Punjab rivers, and like it dependent for their cultivation on the annual river floods. In several other districts, experience had shown that the cultivation in such tracts is so variable, that ordinary peasants cannot go on paying, year after year, a fixed average assessment; and an attempt to realise the land revenue in this way had resulted in much hardship to villages which, for a series of years, failed to get favourable floods. It had been generally agreed by the experienced revenue officers of the Punjab, that in such tracts the land revenue should be collected on a system which should make it fluctuate directly in proportion to the produce of each harvest. In the Sirsa Hitar also experience pointed to the same conclusion. The system of fixed average assessments had, owing to a change in the set of the river, broken down in some villages, and we found an imperfect system of fluctuating assessment in force in 44 of the 62 villages in the Sutlej Hitar. The floods had fluctuated so greatly of recent years and seemed likely to fluctuate so greatly in future, that it was impossible to frame a satisfactory estimate of what would be average half net profits. Rents are almost universally taken in kind, so that the income of the proprietors fluctuates directly with the out-turn of each harvest, and thus a system of fluctuating assessment fits in better with the prevailing rent system than would a system of fixed average assessment. Moreover, when I first talked the matter over with the peasants of the Hitar, they were almost unanimously in favour of a system of fluctuating assessment, of which they had already had some experience. For these reasons I recommended that the lands in the Sutlej Hitar, within reach of the river floods, or dependent upon them for the cultivation, should be placed under a system of fluctuating assessment, the land cultivated each harvest to be measured and assessed at fixed rates per acre.

This recommendation was approved by the Settlement Commissioner (Colonel Wace) and Financial Commissioner (Mr. Lyall), both of whom talked the matter over with the peasants at Fázilka. At first the people were almost unanimously in favour of a fluctuating assessment; then they changed their minds and asked for a fixed assessment, the chief reason, perhaps, being that they were alarmed at the high sound of the rates, which they compared with the average rates of the fixed assessment of their own villages at the Regular Settlement and of the villages across the river in Montgomery. Again, after discussing the question with the Settlement Commissioner, the headmen, all in a body and spontaneously, gave in a petition asking for a fluctuating assessment on principles which have been embodied, almost as they put them, in the system ultimately sanctioned. When the Financial Commissioner (Mr. Lyall) came round on tour a few months after, they again combined to demand a fixed assessment, and some modifications were made in the rules and rates in order to meet their objections. I was strongly impressed by their prejudice against the system of fluctuating assessment, and urged that it should not be forced on the people without their consent, but that I should be allowed to announce the assessment of each village as it would be, if it were a fixed average assessment, and let the proprietors choose between the two, on the condition that, if at any time a village under fixed assessment were to fall into arrears or to ask for fluctuating assessment, the Deputy Commissioner should have the power at once to introduce the latter system. I was, however, instructed to require the people to accept the system of fluctuating assessment for all their lands dependent for cultivation on the floods of the river; lands beyond the influence of the river floods being marked off and given a fixed average assessment calculated on the rates already sanctioned.

322. In arranging the details of the system of fluctuating assessment, I was guided chiefly by the system which had recently been put in force in some distressed villages on the Ravi in the Montgomery district, as modified by Mr. Lyall after some years' experience. As there was some danger that the peasants of the Hitar, who had only recently given up a pastoral for an agricultural life, might allow their land to lie uncultivated and devote themselves to cattle breeding, it was decided that a low assessment should be put upon wood, grass and the other products of the waste, to be levied on the land in its uncultivated or culturable aspect, whether there be a crop or no. The direct produce of the waste to the proprietors is not very large in this circle, as the grazing fees in 1880 amounted to Rs. 470 only and the income from sale of sarr, grass, wood, &c., to about Rs. 500; but the indirect income is considerable as the peasants maintain large mumbers of cattle from whose produce they derive considerable profits. I proposed a rate varying from half an anna to one anna and averaging $\frac{3}{4}$ths anna per acre, and this rate was accepted and acted upon. The total area placed under fluctuating assessment was 46,053 acres, of which 38,009 were returned as culturable, and of this area 19,565 acres were returned at settlement as cultivated. The average rate of $\frac{3}{4}$ths anna per acre on the culturable area would have given an assessment on wood, grass, &c., of Rs. 1,782, and the assessments actually distributed and announced amounted to Rs. 1,856. In distributing the wood and grass assessment I assessed the villages at different rates according to the quality of their soil and the advantages of their position, putting higher rates on those villages whose soil, when uncultivated, produces more valuable grass, and those whose soil, when cultivated, ordinarily produces better crops of their kind than does that of other villages.

The Hitar. Assessment on the land in its uncultivated aspect.

323. In fixing the rates for fluctuating assessment on crops actually grown, it was important to fix simple rates per *bigha*, for all the accounts of the patwárís and of the people are made out in *bigha*, and if the rates contained complicated fractions of an anna per *bigha*, the difficulty of making out the accounts and understanding them would be much increased. The principle accepted was that the rates should amount as nearly as possible to half the net profits of cultivation, and so, on an average of years, they should bring in about the same amount of land revenue as the fixed average assessment at half net profits would bring. For a distribution of the estimated average, half net profits of the whole Hitar tract (Rs. 22,000) the rate of 13 annas per acre on irrigated lands had been accepted, with Rs. 6 per well as an additional charge. This rate was applied to 9,389 acres irrigable from wells, and 13,868 acres irrigable by floods; but I have shown reason for estimating that of this area only 6,000 acres of well land and 7,500 of flooded lands actually produce a crop on an average of years, so that to bring in the same income on an average the rate to be charged on crops actually produced would have to be such that, applied to 13,500 acres, it would produce the same total as would a ratè of 13 annas per acre when applied to 23,257 acres, *i.e.*, it would have to be on the average about Re. 1-6-0 per acre. The staple crop of the Hitar tract is wheat, which occupies 10,000 of the 16,000 acres, annually producing a crop; and according to the estimates of average gross produce on land actually producing a crop, the average outturn and its average value are as follows :—

The Hitar. The rates on irrigated crops.

	Average outturn of wheat (in maunds per acre).	Average price (seers per rupee).	Average value of grain.		Average value of straw.		Total average value of produce of wheat (per acre).	
			Rs.	As.	Rs.	As.	Rs.	As.
Land irrigated by wells	8	25	12	13	1	2	13	15
Land irrigated by floods	6	25	9	10	0	14	10	8
Unirrigated lands ..	5	25	8	0	0	11	8	11

The general rates of rent in kind are one-fourth of the gross produce on lands irrigated from wells, one-third on lands flooded by the river and one-fifth on

unirrigated lands. If half these rates be taken as representing half the net produce, we have the following rates for fluctuating assessment on wheat per acre :—

	Average value of gross produce.		Share representing half net produce.	Resulting rate per acre.	
	Rs.	As.		Rs.	As.
Well lands	13	15	One-eighth	1	12
Flooded lands	10	8	One-sixth ...	1	12
Unirrigated lands	8	11	One-tenth...	0	14

It would seem then that a rate of Rs. 1-12-0 per acre might fairly be chargèd on all land irrigated by wells or floods which actually produces a crop of wheat.

Allowing something for the assessment averaging ¾ths anna per acre already charged on the land in its uncultivated aspect, I proposed an assessment rate on irrigated lands of Re. 1 per bigha, which equals Re. 1-9⅗ per acre.

I urged that there should be only one rate for lands irrigated from wells and for lands irrigated by river floods, as the greater produce of well lands is not more than enough to compensate for the expenditure on the well and the greater trouble of working it, and the average net income to the proprietor from well lands is much the same as that from flooded lands actually producing a crop, as he takes a larger share of the produce of the latter. I also urged that the rates should be applied leniently, and that, as very often land actually sown fails to produce a crop altogether or produces only very little grain, the assessing officer should be allowed to remit the assessment on any field whose produce had failed entirely, and to reduce the rate by half on any field the produce of which is very poor.

After considerable discussion, it was decided that the rate for wheat on well lands should be fixed at Rupee 1-8 per acre or 15 annas per bigha, and on flooded lands at Rupee 1-4 per acre or 12½ annas per bigha, and that the assessing officer should not be given the power to reduce the rate on poor crops, but should be allowed tó remit it altogether on fields or patches on which the crop has failed entirely.

The Hitar. Special rates.

324. The statistics and estimates regarding the other crops commonly grown in the tract were similarly discussed, and it was decided that it was unnecessary to have separate rates for the more valuable crops, such as sugarcane and cotton, for they cover a very small area only, and the greater value of their produce little more than compensates for the greater cost of production. Regarding jowár, barley, gram and vegetables it was held that the average net profit from their cultivation was not so much less than that of wheat as to require a lower rate.

The only crops regarding which a distinction was made were churál, masar and methra, which are grown principally for fodder on land newly thrown up by the river; the land is simply scratched with the plough and a little seed thrown in, and the crop is seldom of much value.

Accordingly a lower rate of 12 annas per acre, or 7½ annas per bigha, was sanctioned for these crops. This will also have the effect of giving a lower rate on land newly brought under cultivation, for it is usual to sow these crops the first year on new land. It was not thought necessary to make any further allowance for new cultivation, for when land is fit to grow wheat, it generally produces a crop good enough to pay the full rate. On unirrigated land, I have estimated that the half net produce of wheat is about 14 annas per acre on the land actually producing a crop, but wheat is comparatively little sown on such land, and the usual unirrigated crop, bájra and pulses, jowár, barley and gram could not fairly pay so high a rate. It was accordingly decided that the rate for all crops on unirrigated lands should be 8 annas per acre or 5 annas per bigha. A small area of land irrigable from wells is sometimes cultivated

for both harvests in one agricultural year, *i.e.*, when the kharíf crop has been harvested, the land is immediately again sown for the rabi. In such a case the two crops together are rarely equal to two full crops, and in order to make allowance for this it was decided that when land had paid the full rate of Re. 1-8 per acre for a kharíf crop, it should be charged only the half rate of 12 annas per acre, for a crop sown in the following rabi, *i.e.*, for double crops (do-fasli) the rate should be Rs. 2-4 per acre or Re. 1-6½ per bigha. To meet the case of new wells under protective certificate, it was decided that so long as the certificate lasts, *i.e.*, until the expiry of 20 years from the date of making the well, the land irrigated from the well, up to a limit of ten acres each harvest, should be charged only half rates, *i.e.*, 12 annas per acre. This gives a remission of 20 × 20 × 20 annas = Rs. 500, and as a well in this tract seldom costs more than Rs. 250, the encouragement offered to improvements by this rule is ample. That a system of fluctuating assessment with this proviso does not discourage improvements, is shown by the fact that, in the first year after its introduction, applications for advances to make wells to the amount of Rs. 9,000 were presented, enough to make 30 new wells.

The Hitar. Summary of rules and rates.

325. Thus the rules and rates sanctioned for the fluctuating assessment in the Sutlej Hitar are as follows :—

(1) The whole assessable area, whether cultivated or not, has been charged with a low assessment on grass, wood, &c., in its uncultivated aspect, leviable with the kharíf instalment without regard to amount of produce. This assessment will vary only when the assessable area is increased or diminished by the action of the river, or by the resumption of a revenue free plot, in which case it will be increased or diminished in proportion.

(2) The crops of each harvest will be observed separately, and assessed at the rates prescribed, but all land having practically no produce will be left free of assessment, whether cultivated for the harvest or not, and whether the crop has failed over the whole field or only over part of it. In the latter case the assessing officer will leave free of assessment that part of the field on which the crop has failed.

(3) The rates chargeable on lands actually producing a crop are as follows :—

Crop on	Assessment Rate.	
	Per acre.	Per bigha.
	Rs. As.	Rs. As.
Unirrigated lands	0 8	0 5
Flooded lands—		
(1) Churál, masar, methra	0 12	0 7½
(2) Other crops, such as wheat	1 4	0 12½
Well and jhalár land—		
(1) Single crop	1 8	0 15
(2) Double crop	2 4	1 6½

(4) Land irrigated from a well under protective certificate will be charged at half rate only while the certificate lasts, up to a limit of ten acres each harvest.

The Hitar. The system announced and carried out.

326. In July 1882, I summoned the peasants of the Hitar together at Fázilka, and explained these orders to them, and required them to accept a fluctuating assessment at the above rates for all lands within reach of the action of the river.

The great majority of them, though they repeated their desire for a fixed assessment, had no great objection to make, but a few villages held out for a time with considerable obstinacy, and it was only after a good deal of reiterated explanation of the advantages of the system and of the necessity under which they lay of accepting the decision of Government and, after they had been left in a small minority by the other villages which had accepted the terms offered, that they gave in and attached their seals to the tenders of engagement. The peasants of this tract are unusually ignorant, obstinate, and given to haggling,

and they had been frightened by the high sound of the rates as compared with those of a fixed assessment which they had been accustomed to hear quoted; but the better class of them said they were willing to accept whichever system was thought best for them, and it is noteworthy that it was the least thrifty and least respectable proprietors (the very class for whom a system of the kind is most required) that held back the longest. One reason for their desire for a fixed assessment no doubt was that, owing to failure of floods and neglect of the Padi inundation channel, much of their land, which used to be flooded by the river, had not been cultivated for some years, and they had hoped that, if they could get a fixed assessment, calculated on their present cultivation, it would be a very light one. Not only, however, did all the headmen of the Wattuán pargana accept the terms offered, but (with the exception of one village, Núr Sháh,) the Hitar villages of pargana Bahak, which might have adhered to their former lease for six years longer, all threw it up and asked to be admitted to the system of fluctuating assessment which had been sanctioned for the Wattuán Hitar. This request was granted, and the only Bahak village which continues to pay under its former lease is Núr Sháh, the assessment of which is fixed as before at Rupees 340 until kharíf 1888, when the former lease will expire, and the flooded lands of the village will come under the general system of fluctuating assessment. Including Núr Sháh for the sake of completeness, there are altogether 62 villages in the Hitar; 11 of these, bordering on the Utár tract, are almost wholly beyond the reach of the action of the river, and in accordance with instructions, I announced the assessments of these villages as average fixed assessments; eight other villages have blocks of land beyond reach of the floods, and these I marked off and gave average fixed assessments. I offered to treat a number of other high isolated blocks in the same way, but the headmen generally asked that, if any part of their village was to be under fluctuating assessment, the whole might be, and as the difference of system would certainly have caused complication of accounts, I complied with their request; and in such cases placed the whole area under fluctuating assessment. So that 43 whole villages and parts of eight others have been placed under fluctuating assessment. The detail is as follows :—

Pargana.	Number of villages.	Total assessment, if all fixed.	Villages placed under fixed assessment.			Villages placed under fluctuating assessment.		
			Whole villages	Parts of villages.	Total fixed assessment.	Whole villages.	Parts of villages.	Total assessment, if fixed.
		Rs.			Rs.			Rs.
Wattuan	45	15,570	8	4	1,495	33	4	14,075
Bahak	17	6,430	3	4	3,000	10	4	3,430
Total Hitar	62	22,000	11	8	4,495	43	8	17,505

The detail of the estimated fixed assessment is as follows :—

Total Assessment.	Pargana Wattuán.		Pargana Bahak.	
	Assessment actually fixed.	Estimated fixed assessment of villages under fluctuating assessment.	Assessment actually fixed.	Estimated fixed assessment of villages under fluctuating assessment.
	Rs.	Rs.	Rs.	Rs.
Remitted on gardens	...	22	5	...
Deferred on wells...	73	805	789	211
Jagirs and revenue-free holdings,	96	582	2,206	3,219
Záildars' one per cent allowance,	12	128	...	...
Balance realisable by Government	1,314	12,538	...	...

As, however, the assessment of Núr Sháh in Pargana Bahak, instead of being Rs. 185 fixed and Rs. 265 fluctuating, will, until the expiry of the former lease, remain at Rs 340 fixed, the present detail of Pargana Bahak is :—

	Assessment actually fixed.	Estimated fixed assessment of villages under fluctuating assessment.
	Rs.	Rs.
Total assessment	3,155	3,165
Remitted on gardens	5	...
Deferred on wells	752	211
Jagír	2,398	2,954

Thus the area under fluctuating assessment, had it been given a fixed assessment, would have at present been assessed at Rs. 14,075 for the Wattuán villages, and Rs. 3,165 for the Bahak villages, total Rs. 17,240; and of this Government would have realised Rs. 12,538 from the Wattuán villages, and Rs. 800 as commutation at $4\frac{3}{8}$ annas per rupee on the assessment of the Bahak villages, after deducting the záildar's fees, total Rs. 13,338. As, however, in working the system, the gardens are left unassessed, and the wells under protective certificate are assessed at half rates only, the amount with which the total annual fluctuating assessment is to be compared is Rs. 13,148 for the Wattuán villages, and Rs. 2,954 for the Bahak villages; total Rs. 16,102.

The Hitar. Method of working the system.

327. In villages under fluctuating assessment, the patwárí makes an inspection of every field each harvest, before the crop is ripe, and enters it up in his annual list of holdings (jamabandi), noting the area sown and the crop, and calculating out the assessment of the full rate both on lands held revenue-free and on revenue paying lands. If the crop has failed, or for any reason the field seems chargeable with less than the full rate, the patwárí makes a mark against the field in his list, to direct attention to it. When the list has been checked on the spot by the girdawár or kanungo, and the crops are getting ripe, the tahsildár, or if duly empowered, the náib-tahsíldár, goes round the villages and inspects the fields noted by the patwárí, and any others to which his attention may be directed, and remits the assessment on any fields or parts of fields which may have produced no crop; remitting at the same time half the assessment on lands irrigated from wells under protective certificate. He then calculates out the assessment for each village, and announces it to the headmen, who collect it from the individual proprietors, to each of whom a note of the amount due from him is given by the patwárí. The Extra Assistant Commissioner then makes a tour through the villages, decides any objections made to the assessment, and satisfies himself generally that it has been correctly done.

The Hitar. Results of the system hitherto.

328. The system has now been working for two years, and the actual assessments have been as follows :—

Harvest.	Pargana Wattuán.		Pargana Bahak.		Total.	
	Total Assessment.	Realisable by Government.	Total Assessment.	Commutation realisable by Government.	Total Assessment.	Realisable by Government.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Rabi 1882	8,042	7,690	1,036	280	9,078	7,970
Kharíf 1882	2,850	2,716	570	155	3,420	2,871
Rabi 1883	7,597	7,300	1,041	282	8,638	7,582
Kharíf 1883	3,436	3,328	734	199	4,170	3,527

Thus the total assessment of these villages for the agricultural year 1882-83 was only Rs. 120-5-8 against the estimated fixed assessment of

Rs. 16-10-2, and the amount realisable by Government was Rs. 10,453 against the estimate of Rs. 13,338. During that year the Padi channel was not in working order, and the area flooded was much less than an average of past years would have given. That the system has been leniently worked, is shown by the fact that, in kharíf 1882, of 2,251 acres actually sown, no less than 770 acres were left free of assessment as producing no crop; in rabi 1883, of 8,631 acres sown, 881 were left free of assessment as producing nothing; and again in kharíf 1883, 493 acres were left unassessed out of 2,415 sown.

This experience of the advantages of the system in a bad season might have been expected to reconcile the people to it, but meanwhile, under Colonel Grey, the Padi channel has been cleared out and re-aligned as the Fázilwah Inundation Canal, and there is every prospect of a great development of irrigation in the tract in the next few years. The people calculate that, if they are given a fixed assessment now on the basis of their past bad years, they will, for the period of settlement, reap all the benefit of the improvement; while under the system of fluctuating assessment their assessment will increase with their cultivation and irrigation. They are consequently more anxious than ever to have a fixed assessment, and their application has been strongly supported by the Commissioner, Colonel Grey, on the ground that the system of fluctuating assessment causes a great deal of trouble to officials and people, and is now no longer necessary in this tract, as its irrigation is now assured by the inundation canals. To me, however, it seems that the recent construction of the Fázilwah is but an improvement of the existing Padi Nala. In Mr. Oliver's time, and again under Mr. Wakefield, much more labour and money were spent on the Padi Nala than have been spent on it during the past year, and indeed the recent improvements have consisted chiefly in a re-alignment of the old Padi, and the construction of a new head, works which are little more than are annually necessary on many inundation canals.

The cost of these improvements is estimated at only Rs. 5,072, or ten annas per acre on the land the canal will irrigate, an expenditure which would be amply repaid to the people by a remission of half the rate for one year only. No doubt the irrigation of the tract is much more secure than before, but experience on other inundation canals elsewhere in the Punjab, and even in Firozepore, to whose canal system the Fázilwah has been attached, has shown that the watchfulness and energy necessary for the maintenance of these canals are not always forthcoming, and that even when they are, the area irrigated varies very greatly from year to year. It seems certain that the annual produce of the Fázilka Hitar, and the annual income of the proprietors will still fluctuate greatly; and I am strongly of opinion that it will be better for the people, as well as fairer and more profitable to Government, that the assessment should continue to fluctuate with the actual produce. I did recommend, in deference to their objections, that the system should not be forced on them; but my recent experience in Gurgáon and Jhajjar of the ruinous effects of a light fixed assessment, even on a thrifty peasantry, in bad years, has convinced me strongly of the unsuitability of a fixed assessment to such a tract and to such a people, whom it would be certain sooner or later to force into debt and mortgage. At all events I deprecate any change of system until the experience of some years has shown the advantages and disadvantages of the present system, which was, after full discussion put in force by the concurrent opinion of such experienced officers as Colonel Wace, Mr. Lyall and Sir Robert Egerton, and I recommend that, if at any time it is changed for a fixed assessment, my detailed village assessment should be revised with reference to the circumstances of the time, and power should be reserved to re-impose the present system on any village which may fall into arrears, or in which the numeral majority of the proprietors may ask for it.

As regards the details of the system, I still think that the rate on lands irrigated from wells and on flooded lands should have been the same, and might well have been Re. 1 per bigha, or Re. 1-9$\frac{3}{5}$ per acre; but it is not advisable now to raise the rates, and the present rates will no doubt, in the course of a few years, bring in, on the average, the amount which would have been given by a fixed assessment. I should be glad, however, if the assessment on wood and grass, to which the people strongly object, were

to be remitted on all land actually assessed as cultivated, and charged only on culturable land left uncultivated. This would cost Government less than Rs. 1,000 per annum, and the resulting satisfaction of the people is worth this small remission. I recommend no other change in the present system.

Extracts from No. 183 S., dated Simla, 7th July 1883, from Officiating Junior Secretary to Government, Punjab, to the Senior Secretary to Financial Commissioner, Punjab.

Para. 7.—THE increase which Colonel Grey has proposed to make to the Firozepore Irrigation establishment in order to enable it to undertake the additional work of the control and management of the Fazílwah canals well, appears to the Lieutenant-Governor to be appropriate, and if the proposals are accepted by the Firozepore District Committee and irrigators they can be carried into effect. As long as the system of fluctuating assessments continues in force in the Hitar tract of the Fázilka tahsil, the Lieutenant-Governor is willing to sanction a contribution from the revenue of half the share of the cost of this establishment which may fall on the Sirsa tahsíl up to a limit of $1\frac{1}{2}$ annas per acre under the fluctuating assessment irrigated by the canal in return for the direct benefit which Government will derive from the extension of irrigation. The question, however, of the fluctuating assessments in the Hitar tract of Sirsa does not appear to the Lieutenant-Governor to have been sufficiently considered in connection with the present proposals, and I am to ask for the expression of the opinion of the Financial Commissioner and of Colonel Grey on the following observations.

Para. 8.—The whole of the Fazilwah canal (over which the system of labour and management will be same as that on the Mobarikhwah in the Firozepore district) and villages out of the 37 which have agreed to construct the Mobarikwah canal are situated in the Hitar assessment circle of the Fázilkah tahsíl, with perhaps some exceptions of the above villages on the Mobarikwah which may be included in the Ferozepore district. The lands of this circle, except those lying in the Utar chaks, are under a fluctuating assessment, and in accordance with this system rates varying from 12 annas to Rs. 2-4-0 per acre are levied on lands irrigated by the natural floods of the river and by wells. In accordance with this method all villages watered by the Fazilwah canal and all Hitar villages of the Sirsa district, except as regards lands in Utar chaks watered by the Mobarikwah canal, will be liable to pay on all lands irrigated by the canals, whether cultivated at the time of settlement or not, a fluctuating assessment which cannot be fixed at less than that leviable on well lands bearing a single crop, *viz.*, Re. 1-8-0 per acre. The Utar villages, however, will pay only 3 or $3\frac{1}{2}$ annas per acre on the area actually cultivated at settlement, and will not be liable to any additional assessment on account of canal irrigation. The Commissioner has proposed that in return for the direct advantage which Government will derive from the development of canal irrigation in the Hitar, a contribution up to a limit of $1\frac{1}{2}$ annas per acre, irrigated in the tract under a fluctuating assessment should be made by Government towards the cost of the irrigation establishment, and, as above said, the Lieutenant-Governor is prepared to sanction this recommendation. The net sum which will therefore probably be leviable from irrigation in the Hitar chak will be Rs. 1-9-0 per acre, allowing an extra anna for the cost of the canal establishment, while in the Utar a payment of only $6\frac{1}{2}$ annas will be demanded on both accounts on each acre of canal irrigated land. It appears to the Lieutenant-Governor that the great difference between the gross payments in the two tracts is likely to give rise to complaints on the part of the Hitar people, who will undoubtedly consider themselves unfairly treated in comparison with those in the Utar circle and in the Ferozepore district. In Mr. Tupper's letter, No. $\frac{102}{566}$ of 2nd May, Sir Charles Aitchison has expressed his willingness to allow a fixed revenue demand to be substituted for a fluctuating assessment as soon as irrigation in the Hitár tracts has been rendered assured by the canals; but until this is done the present system must continue, and in no case can Government consent to forego revenue already due because of the development of canal irrigation. It may be that the Commissioner of the division and the Financial Commissioner have considered this difficulty

and that they do not see any objection to two systems so widely different in their financial effect being applied to the Fazilwah and Mobarikwah canals; but no opinion is expressed on the question in the present correspondence, and His Honor would be glad to know what the view of Colonel Davies and Lieutenant-Colonel Grey regarding it are. It appears to the Lieutenant-Governor that it would at least be possible to exempt the lands recorded as baráni at settlement from payment of a fluctuating canal irrigated rate hereafter, just as maáfi or jagír lands have been exempted from the payment of the owner's rate; but this will affect scarcely one-tenth of the cultivated area of the tract. It has also been suggested that a low water rate of 6 annas per acre to be levied by the District Committee in return for its grant-in-aid of Rs. 5,000, should be imposed from the first on Utar lands irrigated from the Mobarikwah and that half fluctuating rates only (as in the case of wells secured by protective leases) should be levied on Hitar lands taking canal water. But in working out any such plan it will be necessary to guard against possible loss to the fluctuating revenue of the Hitar which Government has a right to expect, and by this system the same favorable terms of exemption as prevail in Ferozepore will not be conceded in Sirsa. As, however, the assessment of the land revenue in Sirsa is much lighter than that in Ferozepore, as far as the Utar chak is concerned, the inequality of treatment of the two districts will probably be found to be more apparent than real.

Para 9.—The difficulty of reconciling the system in force in Ferozepore and which it is proposed to introduce in the Utar, with the arrangements for a fluctuating assessment in the Hitar so as to equalize as nearly as possible the conditions on which all three tracts will receive canal water, are apparently considerable, and the Lieutenant-Governor considers that it is to be regretted that they have not been fully discussed in the present correspondence. His Honor, however, has no wish to delay the commencement of the work of the Morbarikwah canal on this account alone, if Colonel Grey does not think that the financial difference above noted between Hitar and Utar is of any great moment, or is able to see any practical way out of the difficulty.

It must be distinctly understood, however, that no proposal can be accepted which will involve a loss of Government revenue as assessed by the Settlement Officer, and that it is absolutely necessary that the people in the Hitar and Utar tracts should unmistakeably be aware of the exact terms on which Government has permitted the canals to be constructed and the water to be used without payment of royalty for 20 years. On neither of these points will His Honor be able to consider or approve any modifications hereafter on the ground that the conditions which have been proposed and sanctioned were not clearly understood by the people at the time.

Extracts from letter No. 7 C., dated Simla, 24th April 1884, from Officiating Senior Secretary to Financial Commissioner, Punjab, to the Junior Secretary to Government, Punjab.

Para. 7.—It is now necessary to consider the important practical question raised in the 7th paragraph of your No. 1835 already referred to, *viz.*, should the system of fluctuating assessment now in force in the Fázilka Hitar be continued for the present? This question was referred by Colonel Davies for consideration to the Commissioner of Hissár, and the Commissioner of Settlements and Agriculture, and to Mr. Wilson, the Settlement Officer. The later two officers are in favor of maintaining the fluctuating system, at any rate for the present. But Colonel Grey desires to abolish it without delay.

Cf. principally Commissioner Hissar's, No. 11, of 1st January 1884, and the two enclosed Memoranda; also Commissioner of Settlements and Agriculture's No. 7, of 4th January 1884, with enclosures.

The Financial Commissioner considers it unnecessary to discuss the question whether the Fazilwah is a new work or a mere development of the Padi Nullah. Nor does he propose to enter into any debate as to the comparative merits of fixed and fluctuating assessments in the abstract. Such remarks as appear to be necessary on the latter subject he has entered as marginal comments on Colonel Grey's Memorandum of the 3rd of January 1884. Speaking generally, the Financial Commissioner regards the fluctuating system as one to be used *only where it cannot be dispensed with, i.e.* in tracts where it is demonstrable that a fixed assessment which shall be fair to the State cannot be worked without

disaster to the subject. The mere fact that the conditions of agriculture are of a fluctuating character (as where are they not?) is not, in the Financial Commissioner's opinion, sufficient justification for the introduction of a fluctuating assessment.

Before such an assessment is sanctioned, it must be shown not only that the fluctuations are very severe, but that the other conditions are such as to make fixed taxation undesirable. In the present case the Financial Commissioner thinks it clear that no pressure would have been used to induce the people to agree to a fluctuating system of assessment if the recently constructed irrigation works had been completed before the tract was reassessed. But the practical question for consideration is not this, but whether the fluctuating system being now in force, it is desirable to abolish it or modify it before the conditions of the new irrigation have become so far established as to make it possible to frame satisfactorily a fixed assessment which shall be fair both to the people and the Government, or before the questions already discussed as to the manner in which Government shall assert its claim to tax the use of the river water have been finally considered and answered. After full consideration, Colonel Davies is of opinion that it it advisable to maintain the present fluctuating system until we can be quite sure that it can be replaced by another system as good or better; and of this Colonel Davies at present sees no immediate prospect. He, therefore, still adheres to the conclusion expressed in this office letter No. 9452, of 5th November last, that it would be premature to pronounce the irrigation of the Hitar tract assured, and that it is advisable to test the working of the new canals through two seasons at the least before we consent to discuss the advisability of changing the present fluctuating system of assessment in this tract.

Para. 8.—If the fluctuating system be maintained, it is necessary to consider at what rates the land irrigated from the Fazilwah, and the small area in the Hitar which is irrigated from the Mobarikwah, shall be assessed. In the 8th paragraph of your No. 183 S., dated 7th July 1883, it is assumed that the lowest possible rate is that fixed for well lands bearing a single crop, *viz.*, Rs. 1-8-0 per acre. But in his No. 7, of 4th January last, the Commissioner of Settlements and Agriculture has given reasons for thinking that the canal lands must be assessed lower than well lands. And in his No. 55 (which is enclosed with the letter last quoted) Mr. Wilson states his opinion that the flooded land rate of Rs. 1-4-0 per acre would be the appropriate one for these canallands. The Financial Commissioner has concluded, after attentive consideration, that (apart from any concessions which may be granted in recognition of the improvement made by the constructors of the canal) the proper rates to be imposed on the lands irrigated from these two canals in the Hitar tract are—

	Rs.	A.	P.
Chural, masar, methra	0	12	0
Other crops	1	4	0

And in recognition of the efforts made by the people to improve their irrigation, Colonel Davies recommends that all canal irrigated lands recorded at settlement as ether baráni or waste shall pay only half the above rates for ten years, dating from kharíf 1883, if the existing system of fluctuating assessment should so long continue. These proposals are very much more liberal than those recommended by Mr. Wilson in his letter No. 55, already quoted. On the other hand, they fall short of the concessions which have been recommended by Colonel Grey in his No. 313, of 5th December, and in the Memoranda received with his No. 11, of 10th January last. Colonel Davies considers that in cases of this kind it is both just and politic to give very liberal terms. He considers that the concessions which he has above proposed will be abundantly fair to the people, and I am to point out that as near as may be they agree with the terms of protective pattahs granted to the constructors of private irrigation works as laid down in the first and second paragraphs of this office Book Circular No. XIV. of 1881.

Para. 9.—In order to complete the discussion of this branch of the subject, it is necessary to consider whether, if the present fluctuating system of assessment be abolished, it may be replaced by the fixed assessment framed by

Mr. Wilson before the recent development of irrigation, or whether it would not be necessary to re-assess the tract with regard to its present resources. In regard to this question I am to invite attention to the 12th paragraph of Mr. Wilson's letter No. 55, already referred to, in which that officer states his opinion that, if the system be changed, his village assessments must be revised and redistributed in accordance with the altered conditions of this tract. Colonel Davies thinks there can be no doubt of the correctness of this opinion; and if the present settlement agreement be broken, there appears to be no reason why the new assessment should be based on the assets as they formerly existed instead of as they exist at present; but if a fresh assessment were made the villagers would of course be entitled to favourable treatment of their canal irrigated lands up to the expiry of a term of 10 years from the date of the construction of the canal. Colonel Davies has, however, already expressed his opinion that the new conditions are not yet sufficiently established for a satisfactory fixed assessment to be made. The irrigation from the Fazilwah, as Colonel Davies personally observed, is as yet only very partially developed. Colonel Grey estimates that its present extent will be more than doubled, and this in itself seems a good reason for not making any change in the system of assessment for some time to come.

Extracts from letter No. 24, dated Lahore, 7th July 1884, from Officiating Junior Secretary to Government, Punjab, to the Officiating Senior Secretary to Financial Commissioner, Punjab.

Para. 6.—These orders dispose of all minor questions which were raised in my letter No. 7 of July last, and it now remains to consider the more important matters to which the major part of your present letter are devoted, namely, the payment of some kind of royalty on account of irrigation from canals, such as those constructed in the Fázilka tahsíl, and the inequality existing between the Hitar and Utar tracts. The question of a third canal started by Colonel Grey, and called the Shokatwah, also requires separate orders.

Para. 8.—With reference to the second question, namely, the inequality between the gross payments which will be made by the inhabitants of Hitar and Utar tracts the Lieutenant-Governor accepts the conclusion of the Financial Commissioner that there is no help for this, and that matters must be left as they are. I am to point out, however, that this conclusion cannot be considered altogether satisfactory, and that it is an instance of the inconvenience of hurrying on these matters before the full facts of the case are clearly placed before Government, a procedure to which the Lieutenant-Governor will be obliged to absolutely refuse sanction in future.

The fluctuating assessments of the Hitar tract will be maintained for three or four years at least, until it is proved by actual experience that previous fluctuations of cultivation have been removed by the development of inundation canals. If after that period the Financial Commissioner thinks that he can safely recommend that a fixed assessment be substituted for the fluctuating demand, proposals for this purpose may be submitted. There can be no doubt that should fluctuating assessments be hereafter abolished, the villages which are now under that system will have to be re-assessed on their assets as then existing, and that it will not be possible merely to declare a fixed assessment in the place of a fluctuating demand on the assets as recorded at the late Settlement. The Lieutenant-Governor accepts the proposals of the Financial Commissioner that the Hitar villages should pay half fluctuating assessment on canal lands which were waste or unirrigated at the recent settlement for a period of ten years only, and that the rates fixed for the assessment of canal irrigated lands shall be—

	Rs.	A.	P.	
For charal, masar, methra	0	12	0	per acre.
For all other crops	1	4	0	,,